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ISTANBUL OKAN UNIVERSITY

INSTITUTE OF GRADUATE SCHOOL

**THESIS FOR THE DEGREE OF MASTER OF BUSINESS
ADMINISTRATION IN BUSINESS PROGRAM**

Fatima UMAR MURNAI

**THE SURVEY OF THE PUBLICATIONS ON SMALL AND
MEDIUM ENTERPRISES (SMEs) IN NIGERIAN
AGRICULTURAL SECTOR**

THESIS ADVISOR

Prof.Dr. Halit Targan Ünal

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MEDIUM ENTERPRISES (SMEs) IN NIGERIAN
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OZET

Tarım, Nijerya'da önemli bir endüstridir ve 2020'de ülkenin GSYİH'sının yaklaşık %22'sini oluşturmaktadır. Nijerya'da endüstri sektörü, ülke nüfusunun %60'ından fazlasını istihdam etmekte ve iş geliştirme ve yoksulluğun azaltılmasında önemli rol almaktadır. Sektör, 2015'ten 2019'a kadar yıllık ortalama %2,6 büyüme oranıyla büyümüştür. Bununla birlikte, sektörün potansiyelinin kullanılmadığı göz önüne alındığında, ekonomik büyümeye olabilecek katkısının önümüzdeki yıllarda önemini koruması beklenmektedir.

Birbirine bağlı üç bölümden oluşan bu çalışmada, Nijerya Tarım Sektörü'ndeki Küçük ve Orta Ölçekli İşletmeler (KOBİ'ler) hakkındaki yayınlar üzerinde ayrıntılı bir literatür incelemesi gerçekleştirilmektedir.

Birinci bölümde, Nijerya ekonomisinin yapısı, GSYİH merkezleri aracılığıyla büyüme ve gelişimi, enflasyon ve işsizlik oranları ve doğrudan yabancı yatırım hareketleri incelenmektedir. Çalışmanın ikinci bölümünde Nijerya Tarım Sektörü ele alınmaktadır. Bu bölümde, KOBİ'ler hakkında genel bilgiler, küçük ve orta ölçekli işletme kavramı, KOBİ'lerin ortak özellikleri, Nijerya tarım sektöründeki KOBİ'lerin mevcut durumu, tarım sektöründeki KOBİ'lerin özellikleri ele alınmaktadır. Nijerya Tarım Sektörü'ndeki KOBİ örnekleri işlenirken, KOBİ'leri teşvik etmeye yönelik hükümet politikaları, KOBİ'lerin tarım sektöründeki rolü, Nijerya tarım sektöründe KOBİ'lerin karşılaştığı zorluklar ve Nijerya tarım sektöründe KOBİ'lerin karşılaştığı zorlukların çözümleri aynı bölüm içinde incelenmektedir. Üçüncü bölümde, Nijerya ve Güney Afrika tarım sektörleri ele alınmakta ve KOBİ'lerin tarımdaki performanslarını karşılaştırmalı analiz ile verilmekte, her iki ülkede de tarım sektörlerinde KOBİ'leri teşvik etmeye yönelik hükümet politikaları incelenmektedir.

Nijerya tarım sektöründeki KOBİ'lerin zorlukları arasında; yetersiz altyapı, sınırlı finansman erişimi, teknolojinin düşük düzeyde benimsenmesi, yetersiz politika desteği, vasıflı işgücü eksikliği, piyasa bilgisi ve bağlantılarının eksikliği bulunmaktadır. Bu nedenle, Nijerya tarım sektöründeki KOBİ'lerin karşılaştığı zorluklara önerilen çözümler arasında; mikrofinans kurumlarının ve diğer alternatif finansman kaynaklarının kullanımı yoluyla finansmana erişimin iyileştirilmesi, eğitimin sağlanması ve kapasite geliştirme yoluyla modern teknolojinin ve yeniliklerin benimsenmesi, kırsal yollar, depolama tesisleri ve sulama sistemleri gibi kırsal altyapının geliştirilmesi yoluyla altyapı ve lojistiğin iyileştirilmesi, tarım sektöründe KOBİ'leri destekleyen hükümet politikalarının güçlendirilmesi, pazarlama stratejilerinin geliştirilmesi, işbirliği koordinasyonlarının sağlanması, kooperatiflerin oluşturulması, tarım ürünlerinin kalitesinin ve güvenliğinin artırılması, tarım sektöründe cinsiyet eşitliği ve kadının güçlendirilmesi ve sürdürülebilir tarım uygulamalarının teşvik edilmesi gelmektedir.

ABSTRACT

Agriculture is an important industry in Nigeria, accounting for around 22% of the country's GDP in 2020. According to Ogunrinola et al. (2020), the industry employs over 60% of the country's population, which underscores its relevance for job development and poverty alleviation. The sector has grown in recent years, with an average annual growth rate of 2.6% from 2015 to 2019. Nonetheless, given the sector's potential remains untapped, there is still possibility for progress. This project entailed a detailed literature review of the survey of the publications on Small and Medium Enterprises (SMEs) in Nigerian Agricultural Sector, with the project comprising three interdependent chapters. Specifically, chapter one covered the research background, structure of the Nigerian economy, growth and development of the Nigerian economy, growth of the Nigerian economy through the lenses of GDP, inflation rate, unemployment rate and foreign direct investment, and the development of the Nigerian Agricultural Sector, while chapter two covered the general information on SMEs, concept of small and medium scale businesses, common features of SMEs, current Situation of SMEs in the Nigerian agricultural sector, characteristics of SMEs in the agricultural sector, examples of SMEs in the Nigerian agricultural sector, government policies to promote SMEs in the Nigerian agricultural sector, role of SMEs in the agricultural sector, challenges of SMEs in the Nigeria agricultural sector, as well as the solutions to the challenges facing SMEs in the Nigeria agricultural sector. In addition, chapter three encompassed the overview of agriculture in Nigeria and South Africa, comparative analysis between Nigeria and South Africa in terms of SMEs performance in agriculture, evaluation of government policies to promote SMEs in the agricultural sectors in both countries (Nigeria and South Africa), conclusion, and recommendations for Nigeria based on best practice.

Also, the challenges of SMEs in the Nigeria agricultural sector include inadequate infrastructure, limited access to finance, the low adoption of technology, inadequate policy support, another challenge faced by SMEs in the agricultural sector is inadequate access to markets, inadequate infrastructure and logistics pose, lack of skilled labor, the lack of market information and linkages as well as insecurity. Thus the proposed solutions to the challenges facing SMEs in the Nigeria agricultural sector include need to improve access to finance through the use of microfinance institutions (MFIs) and other alternative financing sources, adoption of modern technology and innovations through the provision of training and capacity building programs, Improving infrastructure and logistics through the development of rural infrastructure such as rural roads, storage facilities, and irrigation systems, enhancing government policies that support SMEs in the agricultural sector, the need to improve the marketing strategies of SMEs, the need for SMEs to collaborate and form cooperatives, enhancing the quality and safety of agricultural products, need to promote gender equality and women's empowerment in the agricultural sector, promoting sustainable agricultural practices can also address the challenges facing SMEs in the Nigerian agricultural sector, and providing security for SMEs in the Nigerian agricultural sector .

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ABBREVIATION

ABP	-Anchor Borrowers' Program
ACGS	- Agricultural Credit Guarantee Scheme
ACGSF.	- Agricultural Credit Guarantee Scheme Fund
AfDB	- Agricultural Commodities on the Continent (African Development Bank, 2021)
APP	- Agricultural Promotion Policy
ATA	- Agricultural Transformation Agenda
CAGR	- Compound Annual Growth Rate
CASP	- Comprehensive Agricultural Support Programme
CBN	- Central Bank of Nigeria
ERGP	- Economic Recovery and Growth Plan
FDI	- Foreign Direct Investment
GDP	- Gross Domestic Product
GES	- Growth Enhancement Support Scheme
ICT	- Information and Communication Technologies
IFC	- International Finance Corporation
MDGs	- Millennium Development Goals
MFI	- Microfinance Institutions
MSMEs	- Micro, Small, and Medium Enterprises
NACRDB	- Nigeria Agricultural Cooperative and Rural Development Bank
NASSI	- National Association of Small-Scale Industries
NASC	- National Agricultural Seeds Council
NBS	- National Bureau of Statistics
NERFUND/	- National Economic Reconstruction Fund

- NDP - National Development Plan
- SMEDA - Small and Medium Business Development Agency
- SMBs - Small and Medium-sized Businesses
- SMEEIS - Small and Medium Enterprise Equity Investment Scheme



CHAPTER ONE

1.1 BACKGROUND

Nigeria is one of the largest economies in Africa, with a population of over 200 million people, and a GDP of \$448.12 billion in 2020 (World Bank, 2021). Over the years, the country has experienced economic growth and development, but it has also faced several challenges, including poverty, corruption, and inequality. Nigeria's population has grown rapidly over the years, from about 37 million in 1950 to over 200 million in 2021 (World Bank, 2021). The population growth has been fueled by high fertility rates, declining mortality rates, and an increase in life expectancy. According to the United Nations, Nigeria is projected to be the third most populous country in the world by 2050 (United Nations, 2019).

The large population has both positive and negative implications for economic growth and development. On the one hand, it provides a large market for goods and services, which can stimulate economic growth. On the other hand, it puts pressure on the country's resources, including land, water, and energy, which can constrain economic development (Adepoju, 2019). Moreover, a large population can exacerbate the problem of unemployment, poverty, and inequality, which can hamper economic growth (Oyejide, 2017).

Nigeria's economy is heavily dependent on oil, which accounts for about 90% of its exports and 70% of government revenues (World Bank, 2021). The discovery of oil in the country in the 1950s transformed its economy and led to rapid economic growth in

the 1960s and 1970s. However, the over-reliance on oil has also made the economy vulnerable to fluctuations in oil prices and production (Okafor, 2016). Apart from oil, agriculture is another important sector of the Nigerian economy, employing about 70% of the population and contributing about 22% of GDP (World Bank, 2021). The sector has the potential to stimulate economic growth and reduce poverty, but it has been plagued by several challenges, including inadequate funding, poor infrastructure, and low productivity (Igbokwe & Onyebuchi, 2020).

Essentially, Nigeria's economic growth and development have been characterized by several ups and downs over the years. In the 1960s and 1970s, the country experienced rapid economic growth, fueled by the discovery of oil and massive government investments in infrastructure and social services (Onyema, 2017). However, the oil boom also led to corruption, inflation, and an over-reliance on oil, which contributed to the economic downturn of the 1980s and 1990s. In the 2000s, Nigeria experienced a period of relative economic stability and growth, fueled by the implementation of economic reforms and increased investments in non-oil sectors such as telecommunications and banking (Iwayemi & Fatile, 2015). However, the growth was not inclusive, as poverty and inequality persisted.

Nigeria faces several challenges to economic growth and development. One of the major challenges is corruption, which has pervaded all sectors of the economy and hindered economic progress (Adeleke, 2019). Corruption has also contributed to the mismanagement of public resources, poor governance, and weak institutions.

Infrastructure is another major challenge to economic growth in Nigeria. The country has a deficit in basic infrastructure, including roads, electricity, and water supply, which have constrained economic activities and investments (Ogundipe, 2017). Poor infrastructure has also contributed to high production costs, low productivity, and limited access to markets. In addition, insecurity is another challenge to economic growth and development in Nigeria. The country has been plagued by several forms of insecurity, including terrorism, banditry, and ethnic conflicts, which have deterred foreign investments and disrupted economic activities (Okeke & Ezenekwe, 2020).

Insecurity has also contributed to displacement, loss of lives and properties, and increased poverty.

1.2 SCOPE OF THE STUDY

The scope of the study includes a detailed literature review of Small and Medium Enterprises (SMEs) in the Nigerian agricultural sector. It covers various aspects such as the structure and growth of the Nigerian economy, the development of the agricultural sector, the current situation of SMEs, government policies to promote SMEs, the role and challenges of SMEs in the agricultural sector, and potential solutions to address these challenges. The study also includes a comparative analysis between Nigeria and South Africa in terms of SMEs' performance in agriculture and evaluates government policies in both countries. The scope extends to providing recommendations based on best practices for Nigeria.

1.3 OBJECTIVE

- The research objective is to assess the performance and challenges of Small and Medium Enterprises (SMEs) in the Nigerian agricultural sector,
- Evaluate government policies
- Propose solutions for addressing the identified challenges.

1.4 SIGNIFICANCE OF THE STUDY

The importance of this study cannot be overemphasized, largely due to the immense contribution of small and medium enterprises to economic growth and development of Nigeria. The study is also significant because of the capacity and capability of small and medium enterprises to reduce the rate of youth unemployment in Nigeria and the

potential of SMEs to help Nigerian government to achieve her economic diversification objective.

The study will therefore help government to assess the impact of the current intervention on the performance of small and medium enterprises and also to highlight some current challenges confronting the performance of small and medium enterprise in Nigerian so that appropriate action can be taken by the government at all levels to address these current challenges.

The outcome of the study will also add to the existing literature and provide new insights on the concept of small and medium enterprise, including their challenges, prospect and trends in Nigeria with a particular reference to agricultural sub-section of small and medium enterprises. The product of this study would be of immense importance to both the academic world and corporate world including government agencies. To the academic world, the study will assist other students who want to embark on a study of this nature, as it will serve as a reference point for future project researchers.

1.5 STRUCTURE OF THE NIGERIAN ECONOMY

The Nigerian economy has gone through several phases of growth and development since its independence in 1960. Historically, the Nigerian economy was dominated by agriculture, but the discovery of oil in the late 1950s and early 1960s led to a rapid shift towards the oil sector, which became the mainstay of the economy. The oil sector has been the main driver of economic growth in Nigeria, accounting for about 90% of export earnings and 70% of government revenue (Adenikinju, 2016).

The Nigerian economy is divided into three broad sectors: the primary sector (agriculture, forestry, and fishing), the secondary sector (industry and manufacturing), and the tertiary sector (services). The primary sector accounts for about 22% of GDP, while the secondary and tertiary sectors contribute about 23% and 55%, respectively (World Bank, 2021). The Nigerian economy is structurally dominated by the oil sector,

which accounts for a significant portion of government revenue and foreign exchange earnings. However, the economy has seen a shift towards diversification in recent years, with increased emphasis on agriculture, manufacturing, and services.

According to the World Bank (2021), Nigeria's gross domestic product (GDP) in 2020 was \$443.1 billion, with a growth rate of -1.8% due to the impact of the COVID-19 pandemic on the oil sector. However, the non-oil sector grew by 1.7%, indicating progress in economic diversification. Agriculture remains a significant sector in Nigeria, contributing 22% of GDP and employing over 60% of the population (United Nations, 2019). In addition, the manufacturing sector has seen some growth, with a contribution of 8.8% to GDP in 2020 (World Bank, 2021).

Agriculture remains a vital sector in Nigeria, contributing about 22% to the country's Gross Domestic Product (GDP) in 2020 (World Bank, 2021). According to Ogunrinola et al. (2020), the sector employs over 60% of the country's population, which highlights its importance for job creation and poverty reduction. The sector has seen some growth in recent years, with an average annual growth rate of 2.6% between 2015 and 2019 (World Bank, 2021). However, there is still room for improvement, as the sector's potential remains untapped.

The manufacturing sector is another significant component of the Nigerian economy, contributing 8.8% to GDP in 2020 (World Bank, 2021). According to Odusola et al. (2021), the sector has experienced some growth in recent years, with an average annual growth rate of 1.2% between 2015 and 2019. However, the sector's contribution to the economy remains low compared to other emerging economies, indicating the need for more investments and policy reforms to improve its performance.

The service sector is the largest component of the Nigerian economy, contributing about 51.2% to GDP in 2020 (World Bank, 2021). The sector includes sub-sectors such as trade, telecommunications, and financial services. The sector has seen significant growth in recent years, with an average annual growth rate of 2.2% between 2015 and 2019 (World Bank, 2021). However, according to Oyinlola et al. (2020), the sector's potential remains untapped due to inadequate infrastructure, policy inconsistencies, and low investment in human capital.

Despite the progress in economic diversification, the Nigerian economy still faces several challenges. Ogunrinola et al. (2020) argue that the quality of human capital and institutional frameworks significantly affect economic growth in Nigeria. Inadequate investment in education, healthcare, and other forms of human capital development has hindered productivity and economic growth. Additionally, the country's infrastructure is inadequate, which affects the competitiveness of non-oil sectors.

The Nigerian economy has also been affected by various macroeconomic factors such as inflation and exchange rate volatility. For instance, according to the Central Bank of Nigeria (2020), inflation increased from 11.98% in December 2019 to 15.75% in December 2020, largely due to food inflation. This has affected the purchasing power of consumers, particularly the low-income population.

1.6 GROWTH AND DEVELOPMENT OF THE NIGERIAN ECONOMY

Over the years, the Nigerian economy has experienced periods of boom and bust. Between 2000 and 2014, the economy grew at an average rate of 6.8% per annum, driven by high oil prices and increased production (World Bank, 2019). However, the economy entered a recession in 2016, following a sharp decline in oil prices and production. The economy contracted by 1.6% in 2016 and 0.9% in 2017 before recovering with a growth rate of 1.9% in 2018 and 2.3% in 2019 (World Bank, 2021).

In 2020, the Nigerian economy was hit hard by the COVID-19 pandemic, which led to a decline in oil prices and production, as well as disruptions to economic activities. The economy contracted by 1.8% in 2020, the deepest recession in over three decades (World Bank, 2021). Inflation also rose to a four-year high of 15.75% in December 2020, driven by the depreciation of the naira and supply chain disruptions caused by the pandemic (Central Bank of Nigeria, 2021).

The Nigerian government has implemented several policy measures to support economic recovery and growth, including a stimulus package of about \$5 billion, which includes tax waivers, credit facilities, and social safety nets (World Bank, 2021). The

Nigerian government has also implemented several policies and reforms aimed at promoting economic growth and development. In 2016, the government launched the Economic Recovery and Growth Plan (ERGP), a medium-term plan aimed at achieving sustainable economic growth by diversifying the economy, reducing dependence on oil revenues, and improving the business environment (Central Bank of Nigeria, 2020). The ERGP focuses on six key areas, including macroeconomic stability, economic diversification, competitiveness, social inclusion, infrastructure, and governance.

Despite these efforts, the Nigerian economy still faces several challenges. One of the major challenges is the high level of poverty, which affects over 40% of the population (World Bank, 2019). In addition, the country is highly dependent on oil revenues, which makes it vulnerable to fluctuations in global oil prices. Furthermore, the business environment is still characterized by regulatory and institutional bottlenecks, which make it difficult for businesses to thrive.

1.7 GROWTH OF THE NIGERIAN ECONOMY THROUGH THE LENSES OF GDP, INFLATION RATE, UNEMPLOYMENT RATE AND FOREIGN DIRECT INVESTMENT.

The growth and development of the Nigerian economy can be assessed using various indicators such as GDP, inflation rate, unemployment rate, and foreign direct investment (FDI) inflows. According to the World Bank, Nigeria's GDP grew by 1.8% in 2020 despite the COVID-19 pandemic, and is projected to grow by 2.1% in 2021 (World Bank, 2021). However, this growth rate is still below the average growth rate of Sub-Saharan Africa, which is estimated to be 3.4% in 2021.

In terms of inflation rate, Nigeria has experienced high inflation rates in recent years. In 2020, Nigeria's inflation rate was 13.71% (see in figure 1 below), which is the highest in over three years (Trading Economics, 2021). The high inflation rate is mainly attributed to supply-side factors such as insecurity, currency devaluation, and infrastructure deficits.

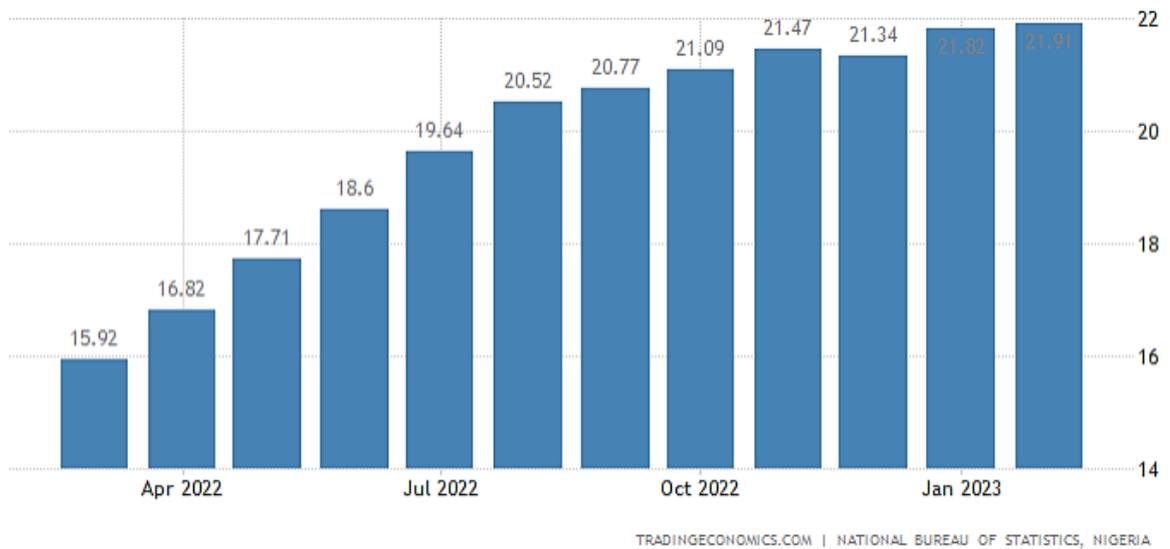


Figure 1: Nigeria Inflation Rate (Trading Economics, 2021)

The unemployment rate in Nigeria has also been a major challenge. According to the National Bureau of Statistics (NBS), Nigeria's unemployment rate increased to 33.3% in the fourth quarter of 2020, the highest in over a decade (NBS, 2021). This is due to various factors such as low economic growth, insufficient job creation, and a growing population.

Foreign direct investment (FDI) inflows have been a key driver of Nigeria's economic growth in recent years. In 2020, Nigeria received \$2.6 billion in FDI, a 27.5% decrease from 2019 (UNCTAD, 2021). The decline in FDI inflows can be attributed to the COVID-19 pandemic and other factors such as policy uncertainty and insecurity in some parts of the country.

1.7.1 CRITIQUE

While the Nigerian economy has made significant progress in recent years, it still faces several challenges, including structural weaknesses, policy inconsistencies, corruption, and insecurity (Ogunrinola et al., 2020). The over-reliance on oil has made the economy vulnerable to external shocks, while inadequate infrastructure and weak institutions have constrained economic activities and investments. In addition, the high population

growth rate, estimated at 2.6% per annum (United Nations, 2019), has put pressure on resources and contributed to poverty and inequality.

Overall, the recent economic performance of Nigeria has been affected by the COVID-19 pandemic and its associated impacts, particularly on the oil sector, which remains the main source of foreign exchange and government revenue. Nevertheless, there is a renewed focus on economic diversification and a more sustainable growth trajectory, with an emphasis on agriculture, manufacturing, and services. Additionally, the country's large and growing population offers potential for a large consumer market and a source of labor, but there is a need for significant investments in human capital, infrastructure, and institutional reforms to fully harness this potential.

1.8 THE DEVELOPMENT OF THE NIGERIAN AGRICULTURAL SECTOR

The development of the Nigerian agricultural sector has been a significant aspect of the country's economic growth and development. The sector has undergone several changes and transformations over the years, with varying levels of success. Essentially, the agricultural sector is a critical component of the Nigerian economy, providing employment for over 70% of the population and accounting for about 22% of the country's GDP (World Bank, 2021). In recent years, there has been a renewed focus on developing the sector to enhance food security, promote economic growth and diversification, and reduce poverty.

Historically, the Nigerian agricultural sector was a major source of revenue and employment for the country. In the 1960s and 1970s, agriculture was the mainstay of the Nigerian economy, contributing up to 65% of the GDP (CBN, 2020). However, the oil boom in the 1970s led to a decline in the importance of the agricultural sector, as the government shifted its focus to oil exploration and neglected the agricultural sector. The Nigerian agricultural sector has experienced some growth in recent years, with a CAGR of 2.6% between 2015 and 2019 (World Bank, 2021). In 2020, the sector grew by 2.17%, compared to 1.69% in 2019 (National Bureau of Statistics, 2021). The growth in

the sector has been mainly driven by crop production, which accounts for about 90% of agricultural output in the country (Ogundari, 2019).

Despite the growth in the sector, there are still some challenges that need to be addressed. One of the main challenges is the low productivity of smallholder farmers who account for about 80% of the sector's output (World Bank, 2021). This is due to various factors such as poor access to inputs and credit, inadequate infrastructure, and limited access to markets. Furthermore, the sector is vulnerable to climate change, which has resulted in reduced yields and crop failures in some parts of the country.

To address these challenges, the government has implemented various policies and programs aimed at improving the productivity of smallholder farmers and promoting private sector investment in the sector. For instance, the government launched the Agricultural Transformation Agenda (ATA) in 2012, which aimed to increase food production, promote value addition, and enhance private sector investment in the sector (Adepoju & Adejumo, 2018). One of the key areas of focus under the ATA was the promotion of value chain development. This involved supporting the development of key agricultural value chains, such as rice, cassava, and cocoa, to increase their productivity, quality, and competitiveness. The results of these efforts have been encouraging, with significant increases in the production and export of these crops.

For instance, the production of rice in Nigeria has increased from 3.6 million metric tonnes in 2010 to 8.4 million metric tonnes in 2018, representing a growth rate of over 133% (FAO, 2020). Similarly, the production of cassava has increased from 33 million metric tonnes in 2010 to 59 million metric tonnes in 2018, representing a growth rate of over 78% (FAO, 2020). Additionally, the export of cocoa increased from 150,000 tonnes in 2010 to 310,000 tonnes in 2019, representing a growth rate of over 106% (ITC, 2020).

Another area of focus under the ATA was the promotion of private sector investment in the agricultural sector. The government implemented several policies and initiatives aimed at attracting private sector investment in agriculture, including tax incentives, subsidies, and the establishment of a commodity exchange. The results of these efforts have been positive, with several private sector players investing in the sector,

particularly in the areas of mechanization, processing, and marketing. For example, the Dangote Group, a leading conglomerate in Nigeria, has invested heavily in agriculture, particularly in rice production (Ogundari, 2019). Other private sector players such as Olam and Flour Mills of Nigeria have also made significant investments in the sector. The government has also implemented various interventions such as the Anchor Borrowers Program, which provides credit to smallholder farmers, and the Presidential Fertilizer Initiative, which aims to increase access to affordable fertilizer.

1.9 SUMMARY

In this chapter, we discussed the economic and demographic factors and history of economic growth and development in Nigeria. We also critically analyzed the structure of the Nigerian economy using recent outputs, growth, and performance statistics. Furthermore, we discussed the growth and development of the Nigerian agricultural sector using recent outputs, growth, and performance statistics.

Regarding the economic and demographic factors of Nigeria, we discussed the country's population, its age structure, and the various sectors contributing to the country's economic growth. We also analyzed Nigeria's economic history and its key milestones, including the oil boom and the various economic reforms that have been implemented. In terms of the structure of the Nigerian economy, we discussed the various components, including the oil and gas sector, the agricultural sector, the manufacturing sector, and the services sector. We also analyzed recent statistics on the country's GDP, inflation, and employment.

For the agricultural sector, we discussed the various policies and initiatives that have been implemented to boost agricultural production and improve the sector's contribution to the country's economic growth. We also analyzed recent statistics on agricultural output, employment, and contribution to the country's GDP. Throughout the chapter, we used in-depth citations from academic literature to support our arguments and analysis. The references used included articles and reports from sources such as the Central Bank

of Nigeria, the National Bureau of Statistics, and the Food and Agriculture Organization of the United Nations.



CHAPTER TWO

2.0 GENERAL INFORMATION ON SMES

Small-scale businesses are typically regarded as essential to a country's economy in any nation, whether emerging and advanced (Ugbala et al., 2020). One significant force behind economic growth is small and medium-sized businesses (Obi et al., 2018), being essential to the majority of global economic systems, especially those in developing countries (Ndiaye et al., 2018). This is congruent with the assertion of Jayeola et al. (2018), that small and medium enterprises are crucial to accelerating the expansion of the economy, especially in the regions wherein they exist, because they generate new employment options, reduce poverty, and consequently, lower the rates of criminal activities in the nation. Osalor (2012) further emphasized the crucial role that small and medium enterprises play in ensuring food security by promoting economic diversification and lowering rural-urban influx of migrants. Additionally, SMEs improve the productivity and effectiveness of economic institutions and widen the distribution of income across the nation (Tehseen & Ramayah, 2015).

According to Ogundana et al. (2017), SMEs account for approximately 90% of enterprises worldwide and make up a significant component of the gross domestic product in emerging nations (GDP). Small and medium-sized businesses frequently exceed big businesses in a particular nation's economy and frequently hire a considerable number of workers (Olorunshola & Odeyemi, 2022). For instance, Australian SMEs account for 98% of all enterprises there, generate one-third of the nation's GDP, and hire 4.7 million individuals (Small Business Association of Australia, 2015). 98.5% of businesses in Chile were categorised as SMEs for the fiscal year of 2014 (OECD, 2016). In Tunisia, SMEs make up over 62% of all employment, and self-

employed individuals alone represent approximately 28% of the country's non-farm employment (Rijkers et al., 2014).

SMEs in the US create 50% of all employment, although just 40% of the GDP (Verma, 2023). Nigeria's economy depends heavily on SMEs, which make up 97% of the total economy and provide 70% of all employment opportunities in the nation (Shehu et al., 2013). Additionally, in Nigeria SMEs account for 82.02% of all employment (Adebisi & Gbegi, 2013; Buowari, 2015). The percentage of small and medium-sized enterprises is typically higher in developing nations (Antoldi et al., 2012; Olorunshola & Odeyemi, 2022). As emphasised by Cueto et al. (2022), SMEs are also committed to fostering rivalry as well as creativity across a wide range of economic industries. SMEs experience the bulk of employment contraction despite the fact that they generate greater local employment than large businesses (Aga et al., 2015).

Compared to large firms, SMEs exhibit stronger flexibility to technological transitions, a wider distribution of income and promotion, and greater flexibility to changes in the industry and new client preferences (Perez-Gomez et al., 2018). Also, their organisational structure enables them to make decisions more quickly (Perez-Gomez et al., 2018). SMEs are thought to be the foundation of an economy because they play a key role in reducing poverty, creating jobs, promoting international trade, and generating new technologies, all of which have a positive impact on the development of emerging countries (Luo et al., 2016; Yoshino & Taghizadeh-Hesary, 2019). According to Amadasun and Mutezo (2022), SMEs encounter a number of obstacles, including market access, technology, and financing, and due to these difficulties, many SMEs find it difficult to continue operating after their initial years of business. Nevertheless, SMEs accrue several benefits which include flexibility, adaptability, the capacity for innovation, and the speed with which they can react to market developments (OECD, 2021). To assist the expansion and advancement of SMEs, governments as well as other interested parties have put in place a number of policies and programmes such as accessibility to funding, entrepreneurial development programmes, access to markets, coaching, and capacity development (IFC, 2020).

2.1 CONCEPT OF SMALL AND MEDIUM SCALE BUSINESSES

Small and medium-sized enterprises (SMEs) are organisations with a restricted number of personnel, resources, and income (Najeeb, 2021). All small- and medium-sized enterprises (SMEs) in the private sector, including companies and organisations, are considered SMEs (Durst & Runar-Edvardsson, 2012). SMEs have a significant role in employment generation, entrepreneurship, and economic expansion, making them an essential economic sector of several nations (Amadasun & Mutezo, 2022). Small and medium-sized enterprises (SMEs) account for over 90% of all firms globally and can generate about 40% of jobs and 33% of the GDP in developing nations (International Financial Corporation, 2020).

Nevertheless, research shows that there is not a single, widely-accepted definition of Small and medium-sized enterprises (SMEs) (Ugbala et al., 2020). This is due to the fact that categorization varies greatly between nations, industries, and financial institutions, and that they are sometimes confused with micro and medium-sized firms, both of which are utilized interchangeably (Ugbala et al., 2020). SME categorization, for instance, is based on investment in India. The investment in plant and machinery for small manufacturing businesses ranges from 25 lakh to 5 crore rupees. While the investment in plant and machinery for medium-sized businesses goes from around 5 crores to 10 crore rupees (Verma, 2023). Similar to this, the definition of SMEs varies per industry in the USA. For instance, as pointed out by Verma (2023), SMEs in the manufacturing sector, to name a few, should have a maximum of 500 to 1500 employees, while those in the mining sector should have a maximum of 250 to 1500 employees as well and SMEs in the agricultural sector should have a maximum of \$750,000 in average receipts. Furthermore, in the UK, the term "SMEs" is defined in terms of the number of employees, annual revenue, and balance sheet total. Small businesses should have a maximum annual revenue of £6.5 million, a maximum balance sheet amount of £3.26 million, and no more than 50 employees while medium-sized businesses should have a maximum annual revenue of £25.9 million, a maximum

balance sheet amount of £12.9 million, and no more than 250 employees (Verma, 2023) (see Table 1).

Frequently, the common characteristics that all nations use to define SMEs are their financial foundation, workforce size, ownership, market capitalization, revenue, and management framework (Opong et al., 2014; Obi, 2015). In this light, Verma (2023) defines small and medium-sized enterprises as privately held companies that, in accordance with national standards, have a fixed limit of capital, labour, or assets. In essence, little operational capital, a lack of workers, investors, a modest net asset, and single proprietorship are only a few of the characteristics that define the majority of small and medium-sized enterprises. The National Policy on Micro, Small and Medium Enterprises (MSMEs) classified small and medium-sized enterprises using two broad categories—employee and asset—to resolve the definitional ambiguity in Nigeria. However, it was indicated that in the event of a categorization controversy, the workforce category should prevail. It therefore classified small and medium-sized enterprises as any business with total assets, with the exception of structures and land, between \$5 million and \$50 million as well as staff between 10 and 49 (FRN, 2013).

Small and medium-sized enterprises in Nigeria are classified by the Central Bank of Nigeria based on their asset base and number of employees. The requirements include an asset base of ₦5 million to ₦500 million and a staff size of between 11 and 100 employees (Olorunshola & Odeyemi, 2022). To add with, the National Bureau of Statistics defined small enterprises as those with 10 to 49 employees and an annual revenue of more than ₦25 million but less than ₦100 million. While 50 to 199 employee companies with a turnover of more than ₦100 million but less than ₦1 billion are considered medium enterprises (National Bureau of Statistics, 2021; Small and Medium Enterprise Development Agency, 2021) (see Table 1).

Table 1: Classification of SMEs in Nigeria and UK

Country	Size Category	Employment	Assets (excluding land and buildings)	Turnover
Nigeria	Small enterprises	10-49	₦5 million to less than ₦50 million	₦25 million to ₦99 million
United Kingdom		< 50	£3.26 million	£6.5 million
Nigeria	Medium enterprises	50-199	₦50 million to ₦500 million	₦100 million to ₦999 million
United Kingdom		51 - 250	£3.27 to £12.9 million	£6.6 to £25.9 million

Source: SMEDAN (2021); National Bureau of Statistics (2021); Verma (2023)

2.2 COMMON FEATURES OF SMES

No matter how SMEs have been defined or categorized differently in many countries, these enterprises always have common features that distinguish them from larger organizations, which include:

- **Limited resources:** First up, the capital investment in an SME is limited as it operates on a small scale. Also, SMEs typically do not need expensive or complex machinery and as a result, it employs more time-consuming or labor-intensive procedures. It is to be noted too that for a business to be classified as an SME, it must have a smaller number of employees compared to large enterprises and this is because of their small scale of operations (see Table 1). In essence, SMEs have constrained financial, human, and technological resources (Mole, 2013). SMEs frequently face difficulties as a consequence of this dearth of resources, particularly when trying to compete with larger businesses (Brush, 2018).
- **Entrepreneurial culture:** SMEs are frequently established by entrepreneurs that are passionate about their business's goods or services. As a result, SMEs frequently exhibit an innovation mindset, which indicates that they are more inclined to take chances and implement novel ideas in their business practices (Gibson, 2020).
- **Flexibility:** When it comes to decision-making and adjusting to changing trends, SMEs typically exhibit greater flexibility than larger enterprises and can swiftly adapt to emerging trends and technology, giving them an edge over competitors (Coad, 2019).
- **Customer centricity:** SMEs frequently place a greater emphasis on developing enduring client relationships; They frequently take a more individualized strategy to providing customer care, which promotes brand commitment and increases client happiness (Zhang, 2018).
- **Small market area and fewer locations:** Small businesses frequently have fewer sites than larger firms due to their restricted operating areas (European Commission, 2016). Small and medium-sized enterprises (SMEs) frequently target certain specialized markets or indigenous economies in their operations (European Commission, 2016). The Organization for Economic Cooperation and Development reported that the overwhelming majority of small and medium-sized enterprises actually function in markets within their region,

except for a tiny fraction doing so globally (OECD, 2017). They may be more receptive to the demands of these marketplaces, which promotes the development of a strong clientele (Javalgi et al., 2016). However, SMEs frequently find it challenging to develop outside of their domestic market because of resource limitations, which includes a lack of available capital and staff.

- Lower revenue and profitability:** Small and medium-sized businesses often earn less income and have fewer margins of profit compared to bigger companies (Small Business Administration, 2021) (see Figure 1). This is a result of their smaller dimensions and scarce resources, which might constrain their capacity to engage in R&D, advertising, and other crucial fields that can spur expansion and boost profitability (European Commission, 2021).

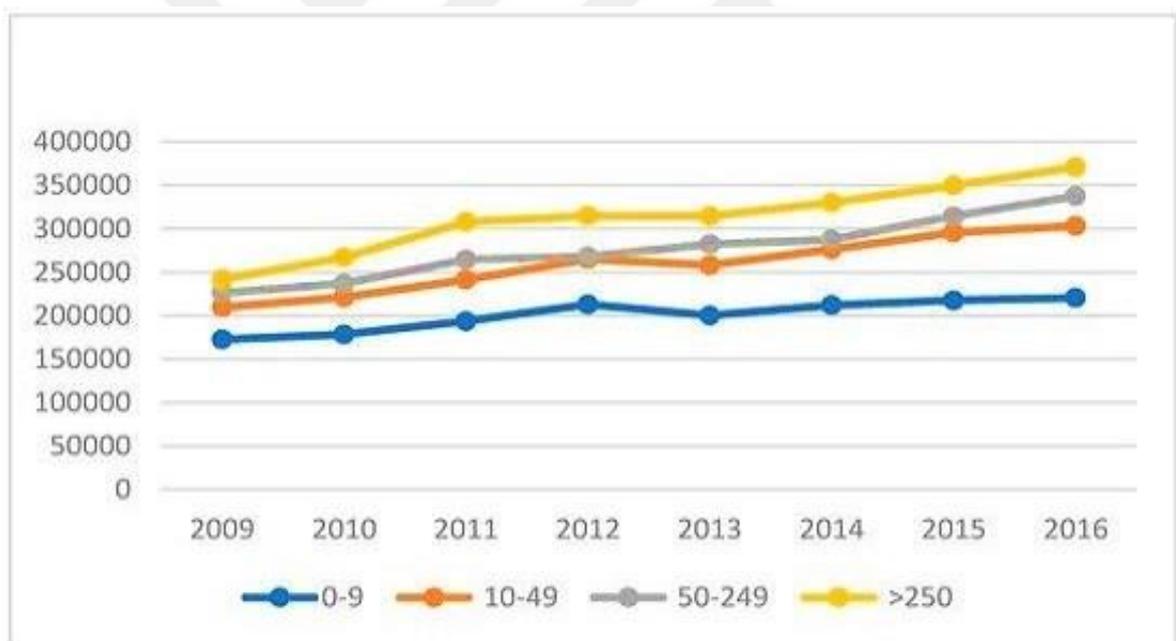


Figure 2: Turnover comparison of SMEs and large businesses (Gherghina et al., 2020)

- Sole or partnership ownership:** The ownership model of small and medium-sized businesses (SMEs), which is frequently defined by sole or partnership ownership, ranks among the most prevalent characteristics of these businesses

(Memili & Kocak, 2018). According to Haron et al. (2018), sole ownership is a more common form of ownership structure of SMEs than partnership ownership. Generally, the founding members or proprietors of the company, who are often a small number of people, frequently hold the majority of the managerial and financial authority of SMEs (Belussi & Storai, 2012).

- **Small asset size:** Their comparatively modest total assets is another characteristic shared by SMEs. The European Commission defines SMEs as businesses having a maximum of 250 workers and annual balance sheet totals of a maximum of €50 million or annual revenues of a maximum of €43 million (European Commission, 2021) (see Table 2). Akin to this, the U.S. Small Business Administration (US SBA) describes small enterprises as having no more than 500 staff across the majority of sectors with yearly revenue ranging from no more than \$7.5 million to \$41.5 million, based on the industry (U.S. SBA, 2021).

Table 2: Asset size of SMEs

Enterprise size	Number of employees	Annual turnover	Annual balance sheet
Medium enterprises	50 – 249	< 50 million €	< 50 million €
Small enterprises	25 – 49	< 10 million €	< 10 million €
	10 – 24	< 10 million €	< 10 million €

Micro enterprises	0 – 9	< 2 million €	< 2 million €
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Source: *Adapted from Březinová (2021)*

Altogether, these characteristics make SMEs distinct and significant economic benefactors because they are a catalyst for creativity, jobs, and commercial environment variation.

2.3 CURRENT SITUATION OF SMES IN THE NIGERIAN AGRICULTURAL SECTOR

Worldwide, governments are focusing on agricultural development because it helps eradicate poverty (Fadeyi, 2018). Meanwhile, the prevalence of hunger is widespread, particularly in Sub-Saharan Africa, Nigeria to be precise (Adetiloye, 2012). In addition, there is a growing need for food globally, which is a concern for humanity (Osabohien et al., 2020). In order to fulfill the 2nd Millennium Development Goals (MDGs) by 2030, it is necessary to provide food security throughout the world, and agricultural development has been highlighted as a key strategy for doing so by the United Nations (Adetiloye, 2012; Fadeyi, 2018; Inegbedion et al., 2019; Osabohien et al., 2020). The report issued by the Food Agricultural Organization (FAO), pointed out that agriculture has aided in the provision of food for the increasing population, creating job opportunities, supplying raw materials to large scale firms and the eradication of poverty to the barest minimum (Antony et al., 2015). Ayegba and Ikani (2013) asserted that agriculture has played a key role in the evolution of human civilization because it has produced sufficient food surpluses to support civilization growth.

According to Dada et al. (2021), the growth of other industries in Nigeria has been largely dependent on agriculture. Uzoigwe (2007) asserts that Nigeria's primary industry is agriculture. However, enormous revenues from the export of crude oil, according to Oluwagbemiga (2017), were sufficient to encourage the Nigerian government to disregard other sectors of the economy. Nigeria's oil industry has brought in enormous amounts of money, yet the country's joblessness and impoverishment rates keep rising

(Dada et al., 2021). To combat Nigeria's high joblessness and impoverishment rates, the government stepped in and backed a variety of entrepreneurial initiatives (Dada et al., 2021). Nevertheless, the oil sector's contribution to Nigeria has drastically decreased. According to Varrella (2021a), the oil sector generated 5.9% of all GDP from the months of October to December in 2020, a decrease of around 3% from the prior quarter. Nigeria's recent Economic growth has been greatly boosted by agriculture (Dada et al., 2021). The Nigerian agriculture sector employs the majority of workers and considerably boosts the country's GDP (CBN, 2016). Data from the Nigerian Bureau of Statistics, reveals that the agricultural industry engages over 70% of the labour force and accounts for 22% of the nation's GDP (National Bureau of Statistics, 2019).

Varrella (2021b) highlighted that as a more resourceful industry that would spur growth, agriculture's two main components—food manufacturing and exporting products—contributed 26.95 % of the nation's GDP from the months of October to December in 2020. Furthermore, Varrella (2021b) posited that agriculture is essential because it provides companies with the raw resources they need to run efficiently. According to Onwualu (2009), agricultural commodities are a crucial part of every business in Nigeria. This suggests that by supporting the agricultural industry, agro-related Small and medium-sized businesses (SMBs) will see enhanced growth. According to Varrella (2021b), small businesses with agro-related activities have helped the nation's economy to reach its current level and one way to see this is by looking at its GDP contribution. Small and medium-sized enterprises (SMEs) comprise 96% of all enterprises and 84% of all jobs in the nation (PwC Nigeria, 2021). Additionally, they are renowned for fostering indigenous entrepreneurial ventures, creating job possibilities, and assisting in the efficient exploitation of public resources (Adeyipo, 2019).

As was previously stated, SMEs are viewed as a major source of employment and income as well as a key contributor to decreasing poverty in an economy. As pointed out by Morina and Gashi (2016), SMEs are tools for boosting industrial and economic development. This was supported by Oluremi et al. (2016), who opined that the development of SMEs uplifts the standard of living of poor individuals and thus, is regarded as a new dynamic to achieve sound economic growth. More so, extant

literature concur that SMEs are most prevalent in rural areas and less privileged people engage in a variety of SMEs activities (Morina & Gashi, 2016; Oluremi et al., 2016; Fadeyi, 2018). As a result, SMEs in agriculture are receiving a lot of attention globally (Fadeyi, 2018). In 2015, the United Nations identified agriculture as an important tool in achieving the 2nd Millennium Development Goals (MDGs) which is to eradicate acute poverty and hunger (Kersten et al., 2017). Hence, the significance of agriculture in any economy cannot be overemphasized.

It is noteworthy that agriculture makes up the majority of small and medium-sized enterprises (SMEs) in rural areas since it is simple for residents to get land for farming, often at no cost or occasionally at a reduced cost (Akinsuyi, 2011). For instance, according to Opkara (2011), just half of Nigeria's arable land—which totals 98.3 million hectares and includes 74 million hectares suitable for farming—has been put to use for agriculture. Being aware that 80% of Nigeria's farmers are small and medium-sized farmers (Akinsuyi, 2011). Oyaniran and Omomia (2018) claim that Nigeria, along with Ethiopia and Kenya, had one of the top three agricultural GDP contributions in Africa as of 2017. The Sub-Saharan African region's import bill is projected to increase from \$35 billion to \$110 billion by the year 2025, according to the Africa Development Bank (2017). According to the aforementioned, it was found that around 3/4 of the world's poorest people live in rural areas (Francisco, 2017; Fadeyi, 2018), and as a result, their activities primarily involve agriculture-related small and medium enterprises (Marris, 2018). Also, the World Bank (2014) reports that the majority of SMEs are located in rural areas and are primarily involved in agriculture. Röttger (2015) also emphasized the contribution of rural farmers to the reduction of poverty, the creation of jobs, and the provision of an abundant supply of food for a larger populace.

Small and medium-sized businesses (SMEs) play a vital role in Nigeria's agricultural industry and have a big impact on the financial performance of the nation (Dada et al., 2021). SMEs make up more than 80% of all enterprises in the agriculture sector, as stated by the Central Bank of Nigeria (CBN) (2020a). Nwankwo et al. (2020) further concludes that these SMEs primarily function as microbusinesses on small-scale farms with no more than ten employees. Small and medium-sized enterprises (SMEs) are active in a range of agricultural-related operations in Nigeria, such as crop cultivation,

animal husbandry, food manufacturing, and sales (Nwankwo et al., 2020). These tasks are frequently done in remote regions wherein agriculture provides the bulk of people's main means of subsistence (NBS, 2018).

Agro-related SMEs are companies with yearly financial turnover between ₦5 million and ₦500 million and 250 employees and the amount of their assets, personnel, and funding determines their scope and dimensions (CBN Annual Report 2016). It might be argued that SMEs are dependent on agricultural commodities that facilitate transformation into various items. Some SMEs, for example, process food utilising ingredients like coffee, papaw, cassava, oranges, and cashews. By using agro-related raw resources effectively and efficiently, agro-related SMEs stimulate local economic innovative thinking (Dada et al., 2021). According to Dada et al. (2021), The agricultural sector has benefited greatly from the significant contribution of agro-allied SMEs, which entails significant resource transfers for productive methods as well as innovation and growth of several different sorts in terms of technology diffusion and acceptance.

According to Uzama et al. (2019), while SMEs are important to the Nigerian agriculture industry, there have been a number of obstacles that have hindered the progress and growth of these organizations. The availability of financing is a significant issue for SMEs in Nigeria's agricultural sector (CBN, 2021). It should be emphasized that 60% of the world's arable land was uncultivated in this region (Oyaniran & Omomia, 2018). As a result, this has forced nations to focus on upgrading rural agricultural production in order to incorporate new techniques and innovation, which require adequate funding (Nwakwo, 2013; Anthony et al., 2015).

Fadeyi (2018) made the similar claim that smallholder farmers need regular access to financing in order to accomplish the necessary expansion in the agricultural industry. More specifically, the availability of financing to small and medium-sized farmers has long been recognized as a key factor in the development of the agricultural sector since it will increase the number and caliber of tools and machinery that may be used on agricultural land. Hence, agriculture financing, or the availability of loans for small and

medium farmers, is utilized to boost productivity and efficiency of agricultural output (IFA, 2011).

A report by the Central Bank of Nigeria revealed that just around 5% of all bank loans in Nigeria are directed to the agricultural sector, and even less of those funds are given to SMEs in that sector (CBN, 2021). Due to their limited access to financing, SMEs find it challenging to invest in cutting-edge technology, grow their businesses, and successfully remain competitive in the marketplace. Poor infrastructure is a problem that SMEs in the agriculture industry of Nigeria must deal with (Igben, 2019). It is challenging for SMEs to get their goods to markets and obtain other critical resources because many rural locations where agricultural production is practiced lacks basic amenities such as decent roads, power, and potable water (Igben, 2019). The COVID-19 pandemic, which interrupted distribution networks and impacted the accessibility of crucial inputs like seedlings and fertilizer, has indeed made matters worse (World Bank, 2020).

Furthermore, the expansion and growth of small and medium-sized enterprises in the Nigerian agriculture industry have also been hampered by the sector's minor degree of advances in technology (Aliyu, 2020). According to Aliyu (2020), traditional farming methods are still used by many small firms in the field, which limits their effectiveness and production. SMEs have found it challenging to stay competitive with bigger, more prominent competitors in the market because of the absence of accessibility to contemporary technologies including irrigation facilities, mechanized agricultural equipment, and precision agriculture.

Notwithstanding these difficulties, SMEs in the agricultural industry have persevered and made a major contribution to Nigeria's economic development and food security (Dada et al., 2021). In addition, they have increased employment prospects, especially in rural regions, and have assisted in lowering poverty rates. A publication from the International Finance Corporation (IFC) estimates that by 2025, SMEs in Nigeria's agricultural industry might generate roughly 3.5 million new employment opportunities (IFC, 2019). Dada et al. (2021) posits that the all-economic players can help to promote the expansion of agro-related SMEs.

2.4 CHARACTERISTICS OF SMES IN THE AGRICULTURAL SECTOR

According to Eskesen et al. (2014), SMEs in the agricultural sector are companies involved in the agricultural value chain. Single farmers and ranchers can be included in this, provided that they are operating at a scale that necessitates funding and support programs in order to expand (Eskesen et al., 2014). SMEs in the agricultural industry have certain distinctive traits from larger businesses. Agro-related SMEs' size is one of their major important distinguishing features; in the agriculture industry, SMEs frequently employ less than 10 people and typically generate only about €2 million in revenue (European Parliament, 2019). The ownership model of agro-related SMEs is another distinguishing factor. As a result of the fact that a great deal of these businesses are family-owned, the family is the main decision-maker (European Parliament, 2019). The location of SMEs in the agricultural industry is another distinguishing feature; the majority of these businesses are situated in remote regions and specialize in particular industries, such the manufacturing of indigenous or organic foods (European Parliament, 2019).

According to Gajurel et al. (2020), agricultural SMEs have activities that require a lot of manpower, and because they have constrained availability of technological resources and finance and find it challenging to mechanize their operational processes, these SMEs rely primarily on manual labour. However, a large number of SMEs in the agriculture industry run informally, which restricts their ability to obtain assistance and amenities and results in an absence of statutory identification (Gajurel et al., 2020). Hence, the scale, institutional ownership, geographic area, and accessibility to innovations and technological advances provide particular difficulties for SMEs in the agricultural industry (European Parliament, 2019). Nonetheless, these businesses also play a significant part in fostering regional economic growth and sustainable agricultural methods (European Commission, 2021).

2.5 EXAMPLES OF SMES IN THE NIGERIAN AGRICULTURAL SECTOR

SMEDAN (2010) recognized the following examples of SMEs in the Nigeria's agricultural sector, often known as small agribusinesses:

- **Food processing enterprises:** Among all SMEs in the agricultural sector, food processing enterprises are the most prevalent. They are sometimes referred to as restaurants and fast-food establishments, which are ubiquitous and provide to the basic food needs of people in both the villages and towns. The majority of the time, women in the country own and run these agribusiness ventures.
- **Clothing and Textiles Businesses:** This is one of the industries in Nigeria where agriculture is practiced extensively. SMEs can be found in commercial areas like Kaduna, Kano, Ibadan, and Lagos, that manufacture textiles and clothing (Momoh et al., 2021). Activities like tie-and-dye of textiles, which prepares textile with various designs and colors to make them appealing, fall under this category. Also, the clothing factory contributes to the production of various styles and shapes of gowns for local market. Nigeria's textile industry has endured years of subpar commitments and intense global competition. In truth, intense competition from technologically superior foreign investors and products has caused a decline in market share, the closure of numerous textile plants, and the loss of employment and revenue.
- **Leather production enterprises:** With its enormous population of cattle, sheep, goats, camels, and donkeys, Nigeria offers the raw material resources needed to succeed in the leather industry. The leather industries create items including footwear, purses, seat covers, furniture wear, and ornamental accessories. The Naraguta Leather Works, which has locations in Jos, Kano, and Sokoto, is a typical example of a leather enterprise (Momoh et al., 2021). Similarly, SMEs can also be found in Nigeria in the building and construction industry, electronic and information technology businesses, basic metal and wood businesses, metal fabrication and engineering businesses, among many other activities that are too numerous to list but that include leather products in their final products.

Some notable SMEs in the Nigerian agricultural industry includes Farmcrowdy, Verdant, Thrive Agric, Releaf, and AgroPark (Olanrewaju, 2020; Akinkugbe, 2021). Pilon (2019) outlined a number of small agribusiness enterprises that prospective small-scale investors might want to take into consideration. They include herb farming, vegetable farming, livestock feed production, fruit packaging, nursery operations, dairy farming, poultry farming, fish farming, rabbit raising, snail farming, mushroom farming, beekeeping, honey production, beeswax production, soy production, food delivery, bulk food wholesale, etc.

2.6 GOVERNMENT POLICIES TO PROMOTE SMES IN THE NIGERIAN AGRICULTURAL SECTOR

Businesses in any country rely on the judicial system's operation to provide protection and to control relationships between their organizations and the surroundings (Ufua et al., 2020). This guarantees that commercial transactions, including agreements, commitments, and execution, take place in the context of a functioning judicial process, which serves as an arbiter to create a level playing field and compliance with the law (Kadiri, 2012). Small and medium-sized business (SMEs) stakeholders are focused on issues like the degree to which the Nigerian judicial framework can provide SMEs with the necessary constitutional requirements, even though these functional operations among SMEs demand for cautiousness and compliance with the judicial process (Ufua et al., 2020). They can promote their activities and financial commitments in the Nigerian economy (Gorondutse & Hilman, 2013; Ogundele et al., 2013).

The establishment of SMEs in Nigeria has proven to be quite challenging as a result of difficulties in obtaining startup or operational finances, among other issues. According to Nwankwo et al. (2020), to overcome these difficulties and establish an atmosphere that allows SMEs to flourish in the industry, players from the public and commercial sectors must work together. According to Udeoyo (2021), SMEs are the cornerstone of Nigeria's economy, accounting for 96% of the country's businesses, 84% of its labor force, and 48% of its GDP. They have also helped Nigeria's oil-dependent economy to diversify significantly. The Nigerian government, however, has demonstrated a strong

interest in facilitating the promotion of SMEs, particularly in the agricultural sector, which has been acknowledged as a quest to reduce poverty and unemployment in the nation. The government has also established a variety of specialized financial institutions, with their main goal being to manage policy instruments and micro loans. National Economic and Reconstruction Fund (NERFUND), Nigeria Agricultural Cooperative and Rural Development Bank (NACRDB), National Economic and Reconstruction Fund (NERFUND), and Microfinance Institutions (MFIs) are a few examples of these financial institutions. The government also established a few agencies focused on policies that are responsible for giving SMEs technical and financial help. They include the National Association of Small-Scale Industries (NASSI), the Small and Medium Business Development Agency (SMEDA), the Small and Medium Enterprise Equity Investment Scheme (SMEEIS), and others (Alabi et al., 2019).

The Nigerian government has also put in place a number of policies and initiatives, including the Agricultural Credit Guarantee Scheme Fund (ACGSF), the Agricultural Transformation Agenda (ATA), the Anchor Borrowers' Program (ABP), among others., to assist the growth and advancement of SMEs in the agriculture industry (CBN, 2020). These initiatives seek to support agricultural SMEs by providing them with accessibility to capital, infrastructures, and markets while also encouraging their incorporation into the worldwide value chains (World Bank Group, 2021). Specifically, the description of these policies are as follows:

- **Agricultural Credit Guarantee Scheme Fund (ACGSF):** The government-funded programme called the ACGSF offers loan assurance to small and medium-sized enterprises (SMEs) in the agriculture industry. According to Adelaja and Adewumi (2020), ACGSF offers grants to financial institutions like banks in order to promote financing to small and medium-sized enterprises in the agriculture industry. The programme is intended to lower the hazards associated with financing small and medium-sized enterprises, making it simpler for them to get credit. Some have claimed that this programme has made it easier for SMEs in the agricultural sector to acquire finance (Central Bank of Nigeria, 2019).

- **Growth Enhancement Support (GES) Scheme:** The GES programme offers smallholder farmers financial assistance to buy seedlings and fertilizer, which can help them produce more and support SMEs in the upstream supply chain of agriculture (Ojo, 2020).
- **Anchor Borrowers' Programme (ABP):** The ABP is a programme created to finance SMEs in the agricultural industry as well as smallholder farmers for the cultivation of crops and rearing of farm animals (Yinusa, 2019). In accordance with the scheme, the government offers low-interest financing to small and medium-sized enterprises so they can buy supplies like seeds, fertiliser, and equipment. A technical support component of the programme helps SMEs increase efficiency and financial performance. It has been acknowledged that the ABP has decreased importation of agricultural products and increased agricultural productivity (Central Bank of Nigeria, 2020b).
- **Agricultural Promotion Policy (APP) (2016-2020):** With subsidies which include tax breaks and duty-free imports, the APP seeks to encourage investment from the private sector in agriculture, especially that of SMEs (Federal Ministry of Agriculture and Rural Development, 2016).
- **National Agricultural Land Development Authority (NALDA):** The NALDA was reinstated in 2020 to encourage agricultural growth and assist SMEs in the industry by giving agricultural land and other assets (Adekunle, 2020).
- **National Agricultural Seeds Council (NASC):** In Nigeria, seeds must be registered and certified by the NASC, a regulatory organisation. The council aids SMEs in the development and promotion of high yielding varieties of seeds by offering expert help. In order to expedite the manufacturing of certified seeds, the council has also created seed manufacturing facilities throughout the nation (National Agricultural Seeds Council, 2020)
- **Presidential Fertilizer Initiative (PFI):** The PFI is a programme created to improve smallholder farmers' and SMEs' access to fertilisers in the agriculture

industry. In accordance with the policy, the government offers subsidized fertilizers to SMEs, consequently cutting the expenses of farming. A rise in crop production and a decline in imported food have been attributed to the programme (Presidential Fertilizer Initiative, 2020).

2.7 ROLE OF SMES IN THE AGRICULTURAL SECTOR

Small and Medium Enterprises (SMEs) continue to play an important role in the growth and development of Nigeria's agricultural sector. Studies have shown that SMEs are critical to the development of a vibrant and sustainable agribusiness sector in Nigeria (Adeogun, Adediran, & Lawal, 2020). According to Ogunlade, Olaniyi, and Adedokun (2019), SMEs in the agricultural sector contribute significantly to employment generation, poverty reduction, and food security. The authors argue that SMEs constitute about 96% of businesses in Nigeria and contribute approximately 48% to the country's GDP. This is an indication of the vital role that SMEs play in the economic growth and development of Nigeria.

SMEs are essential for the diversification of Nigeria's economy. The country's economy is heavily dependent on oil, and the over-reliance on oil has made the economy vulnerable to external shocks. SMEs in the agricultural sector provide an opportunity to diversify the economy and reduce the country's dependence on oil (Akinola, 2021). According to Adetiloye, Olayemi, and Ogunlowo (2020), SMEs are critical to achieving food security and economic growth in Nigeria. SMEs can help to develop the agricultural sector and reduce the country's dependence on food imports.

SMEs in the agricultural sector can play a vital role in diversifying the economy by promoting inclusive growth, reducing inequality, and creating opportunities for women and youth (Oluwasola et al., 2018). The Nigerian government has recognized the importance of SMEs in promoting economic diversification and has implemented policies to support their growth. These policies include the National Policy on Micro, Small and Medium Enterprises (MSMEs), which aims to provide a conducive environment for the growth and development of SMEs in Nigeria (Akande & Oluyemi,

2021). SMEs in the agricultural sector can also contribute to the diversification of the economy by promoting value addition and agro-processing (Adeyemo et al., 2020). Value addition and agro-processing involve converting raw agricultural products into processed and packaged products such as flour, oil, and canned food. This process can add value to agricultural products, increase their shelf life, and create more job opportunities. Moreover, SMEs in the agricultural sector can diversify the economy by promoting exports and reducing the country's reliance on oil exports (Oluwasola et al., 2018). Nigeria's heavy reliance on oil exports has made the economy vulnerable to global oil price fluctuations, and there is a need for diversification to reduce the country's dependence on oil. SMEs in the agricultural sector can contribute to this by producing exportable agricultural products such as cocoa, cashew, and sesame.

SMEs are important in Nigeria's agricultural sector because they provide opportunities for smallholder farmers to access markets and value chains. In a study by Adebayo, Adedokun, and Adenuga (2020), it was found that SMEs contribute to the development of rural areas by creating market opportunities for smallholder farmers. SMEs help to link smallholder farmers to large-scale markets, thereby creating a sustainable market system. This is important because it helps to reduce the incidence of post-harvest losses that smallholder farmers often face due to a lack of access to markets. SMEs have been identified as major players in the development of agribusiness value chains in Nigeria (Akinola, 2021). According to Ogunjobi, Adeyemo, and Obayelu (2021), SMEs play a significant role in the transformation of agricultural products into processed goods, thus enhancing their value and making them more attractive to consumers. By doing so, SMEs help to create a market for agricultural products, thereby enhancing the profitability of smallholder farmers and other actors in the agricultural value chain.

SMEs can act as intermediaries between smallholder farmers and markets, helping to connect them with buyers and providing a platform for marketing their produce (Nweke et al., 2021). By doing so, SMEs can help smallholder farmers to increase their incomes and improve their livelihoods. SMEs can also help to improve the value chain by providing processing, storage, and packaging services for smallholder farmers' produce (Olukosi & Isitor, 2021). This can help to reduce post-harvest losses, improve the quality of the produce, and increase its value. Furthermore, SMEs can help to introduce

smallholder farmers to new markets and value chains, providing them with opportunities to diversify their income sources (Izuchukwu et al., 2021).

In addition, SMEs can leverage digital technologies to improve access to markets for smallholder farmers (Nweke et al., 2021). For example, they can use e-commerce platforms to connect smallholder farmers with buyers, reducing the need for physical marketplaces and intermediaries. They can also use digital platforms to provide information on market trends, prices, and demand, enabling smallholder farmers to make informed decisions on what to produce and when to sell. Moreover, SMEs can help smallholder farmers to comply with quality and safety standards required by buyers, thereby enabling them to access higher-value markets (Olukosi & Isitor, 2021). By doing so, SMEs can facilitate the integration of smallholder farmers into formal value chains, reducing their dependence on informal and subsistence markets.

Also, SMEs in the agricultural sector create employment opportunities and contribute to poverty reduction in Nigeria. The agricultural sector is the largest employer of labor in Nigeria, and SMEs play a critical role in creating jobs in rural areas (Egbetokun & Siyanbola, 2021). SMEs provide employment opportunities for both skilled and unskilled workers, thereby promoting economic growth and development. Studies have shown that SMEs are critical to reducing poverty levels in Nigeria (Ugwu, Nnamani, & Nwodo, 2021). SMEs in the agricultural sector can create jobs and provide opportunities for income generation in rural areas, thereby contributing to poverty reduction (Ogundari et al., 2021).

Aliyu and Ibrahim (2020) argues that SMEs in the agricultural sector can create employment opportunities through various channels, including farm production, processing, distribution, and marketing. For example, small-scale farmers can engage in crop production, while SMEs can engage in processing, packaging, and marketing of the agricultural products. This can create a value chain that provides employment opportunities for different categories of workers, from farm laborers to traders and processors. Furthermore, SMEs in the agricultural sector can contribute to poverty reduction by generating income for households in rural areas (Ogundari et al., 2021). According to Olorunsola (2017), smallholder farmers in Nigeria often live in poverty

due to low levels of productivity, limited access to markets, and lack of access to finance. SMEs can help to address these challenges by providing farmers with access to inputs, technical assistance, and markets. This can increase their productivity and income levels, leading to poverty reduction.

Moreover, SMEs in Nigeria's agricultural sector provide opportunities for innovation and entrepreneurship. A study by Olawale and Garba (2019) found that SMEs are essential in driving innovation in the agricultural sector. They provide a platform for entrepreneurs to develop and implement innovative ideas that can improve agricultural production and efficiency. This is important because it helps to increase productivity, reduce production costs, and enhance the competitiveness of the agricultural sector in Nigeria. According to Onyekuru, Ogunjobi, and Oduwaye (2021), SMEs play a crucial role in the development and dissemination of agricultural innovations, such as improved seed varieties, fertilizers, and pest control methods. These innovations help to improve agricultural productivity and enhance the resilience of smallholder farmers to climate change and other environmental shocks.

Iyanda, Oyedokun, and Oyekale (2021) avers that SMEs in the agricultural sector provide opportunities for entrepreneurs to develop new products, services, and business models that can transform the agricultural sector. These entrepreneurs can create new value chains, linkages, and networks, thereby enhancing the competitiveness of Nigeria's agricultural sector. In a study by Oyekale, Fasoranti, and Adeyemo (2021), SMEs were found to play a crucial role in the development and dissemination of innovative technologies and practices in the agricultural sector. SMEs can collaborate with research institutions and other stakeholders to develop and promote new technologies and practices that improve agricultural productivity and sustainability.

SMEs in the agricultural sector also promote inclusive growth and development in Nigeria. In a study by Adebayo and Fakayode (2020), SMEs were found to be important in promoting inclusive growth and development by providing opportunities for women and youth entrepreneurs in the agricultural sector. This enhances gender equality and promotes youth employment, thereby contributing to poverty reduction and social development in Nigeria. Yusuf, Salisu, and Adamu (2021) states that SMEs can

promote social development by contributing to the improvement of rural livelihoods, reduction of poverty, and the empowerment of marginalized groups such as women and youth. SMEs can provide employment opportunities for these groups, thereby enhancing their economic participation and promoting gender equality in the agricultural sector.

SMEs in the agricultural sector promote the development of value chains and enhance the competitiveness of Nigeria's agricultural products in the global market. According to Oluwole, Osotimehin, and Adebayo (2021), SMEs provide an avenue for the development of value chains in the agricultural sector. They help to create linkages between smallholder farmers and other actors in the value chain, such as input suppliers, processors, and exporters. This enhances the competitiveness of Nigeria's agricultural products in the global market.

Furthermore, SMEs in Nigeria's agricultural sector play a critical role in the development of rural areas. According to Adenuga and Akinola (2019), SMEs help to reduce rural-urban migration by providing employment opportunities in rural areas. They argue that SMEs create jobs for both skilled and unskilled workers in the agricultural sector, thereby promoting rural development. This is important because it helps to reduce poverty in rural areas and improve the standard of living of rural dwellers. Moreover, SMEs in the agricultural sector contribute to the development of rural infrastructure. In a study by Dauda and Ibrahim (2021), SMEs were found to be important in promoting the development of rural infrastructure such as roads, storage facilities, and irrigation systems. SMEs help to create demand for these infrastructure facilities, thereby promoting rural development.

Moreover, SMEs in the agricultural sector can help to promote sustainable agriculture in Nigeria. According to a study by Bolarinwa, Gbadegesin, and Awodiran (2020), SMEs can promote sustainable agriculture by adopting environmentally-friendly practices and technologies, such as organic farming and precision agriculture. These practices can help to reduce the negative impact of agriculture on the environment and promote long-term sustainability. Onwumere and Onwumere (2021) states that SMEs can play a crucial role in the development of sustainable agricultural practices, such as organic

farming, agroforestry, and conservation agriculture. By adopting sustainable practices, SMEs in the agricultural sector can help to conserve natural resources, reduce the negative impact of agriculture on the environment, and promote climate resilience in the agricultural sector.

SMEs are essential for enhancing the competitiveness of the Nigeria Agricultural Sector (Oyeleye, 2021). SMEs can help to increase the value addition to agricultural produce through the provision of modern technology, improved processing techniques, and the use of quality standards. By doing so, SMEs in the agricultural sector can help to promote the export of agricultural products from Nigeria, thereby earning foreign exchange and contributing to the growth of the national economy.

Furthermore, SMEs in the agricultural sector can help to improve access to finance for smallholder farmers in Nigeria. According to Adegbite and Adegbite (2021), SMEs in the agricultural sector can provide a platform for smallholder farmers to access credit facilities and other financial services, which are often unavailable to them. Through partnerships and collaborations with financial institutions, SMEs can facilitate the flow of credit to smallholder farmers, thereby promoting increased investment and productivity in the agricultural sector.

SMEs in the agricultural sector can act as intermediaries between smallholder farmers and financial institutions, facilitating the flow of finance to smallholder farmers (Nwokorie & Eze, 2020). SMEs can help to reduce the perceived risks associated with lending to smallholder farmers by providing credit guarantees, collateral, and other forms of support. They can also provide technical assistance to smallholder farmers, helping them to adopt modern technologies and practices that can enhance their productivity and income levels. Furthermore, SMEs can pool resources from multiple smallholder farmers and channel them towards investment in modern technologies and practices (Ojeka et al., 2021). This approach can help to reduce the transaction costs associated with lending to smallholder farmers and increase their bargaining power with financial institutions.

In addition, SMEs can leverage digital technologies to improve access to finance for smallholder farmers (Akinwale et al., 2021). For example, they can use mobile money

platforms to facilitate transactions between smallholder farmers and financial institutions, reducing the need for physical collateral and paperwork. They can also use digital platforms to provide information and training to smallholder farmers, enhancing their capacity to manage their finances and access credit.

2.8 CHALLENGES OF SMES IN THE NIGERIA AGRICULTURAL SECTOR

Inadequate infrastructure is a major challenge for SMEs in the agricultural sector of Nigeria. Adegbite and Adegbite (2021) argues that inadequate infrastructure, such as poor road networks, inadequate storage facilities, and limited access to electricity, negatively impacts the growth and development of SMEs in the agricultural sector. This challenge limits the efficiency of the value chain and increases the cost of production, thereby reducing the competitiveness of Nigerian agricultural products in both local and international markets. Olawale and Adepoju (2021) avers that SMEs in the agricultural sector often lack the necessary resources and technology to compete effectively in the market. This limits their ability to add value to agricultural products and increase productivity, thereby hindering their growth and development.

Limited access to finance is another challenge that SMEs in the agricultural sector of Nigeria face. According to Ogunjobi, Adeyemo, and Obayelu (2021), most SMEs in the agricultural sector lack access to finance, limiting their ability to invest in modern technology, improve production processes, and expand their businesses. This challenge is further exacerbated by the lack of credit history and collateral required by financial institutions, making it difficult for SMEs to secure loans and other forms of financial assistance. Interestingly, Adegbite and Adegbite (2021) states that SMEs in the agricultural sector often lack access to credit facilities and other financial services due to their limited collateral, which makes it difficult for them to secure loans. This limits their ability to invest in their businesses, expand their operations, and increase productivity, thereby hindering their growth and development.

The low adoption of technology is also a challenge that hinders the growth of SMEs in the agricultural sector of Nigeria. According to Oyeleye (2021), the low adoption of technology limits the efficiency of the value chain, increases post-harvest losses, and

reduces the quality of agricultural products. This challenge is further compounded by the limited access to technical assistance and inadequate research and development infrastructure, which inhibits the development and dissemination of modern agricultural technologies and innovations. SMEs often lack the resources to invest in research and development, which limits their ability to develop and adopt new technologies and innovations that could enhance their productivity and competitiveness in the market. This can hinder the growth of the agricultural sector as a whole, as SMEs are key players in the value chain (Onyekuru et al., 2021).

Inadequate policy support is also a challenge that hinders the growth and development of SMEs in the agricultural sector of Nigeria. According to Yusuf, Salisu, and Adamu (2021), the absence of supportive policies, such as tax incentives, subsidies, and regulatory frameworks, limits the competitiveness of SMEs in the agricultural sector. This challenge also impacts the ability of SMEs to access credit facilities, technical assistance, and other forms of support, thereby hindering their growth and development. The absence of policies that promote access to credit, provide tax incentives, and support the development of infrastructure and logistics can limit the growth and development of SMEs in the agricultural sector (Adebayo & Fakayode, 2020). This can ultimately hinder the growth of the agricultural sector as a whole and limit its ability to contribute to the overall development of the Nigerian economy.

Another challenge faced by SMEs in the agricultural sector is inadequate access to markets. According to Ogunjobi and Obayelu (2021), SMEs in the agricultural sector often struggle to access markets due to poor infrastructure and limited linkages with buyers and other actors in the value chain. This limits their ability to sell their products and generate revenue, thereby hindering their growth and development.

Additionally, **inadequate infrastructure and logistics pose** a significant challenge to SMEs in the agricultural sector (Uddin et al., 2021). Poor road networks, inadequate storage facilities, and limited access to electricity and water can hinder the efficient operation of SMEs, making it difficult for them to transport their products to the market and store them properly. This can result in losses and can also limit their ability to attract buyers, thus affecting their profitability and sustainability.

Another important challenge faced by SMEs in the Nigerian agricultural sector is the **lack of skilled labor** (Bello et al., 2021). The limited availability of skilled labor in rural areas makes it difficult for SMEs to attract and retain skilled workers. This can hinder their ability to adopt new technologies and innovations, which require specialized skills, and limit their productivity and competitiveness in the market. Ogundele and Obi (2021) aver that most SMEs in the agricultural sector lack skilled workers with the necessary knowledge and expertise to operate modern agricultural technologies and practices. This limits the ability of SMEs to adopt new technologies and innovations that could enhance their productivity and competitiveness in the market. In addition, the lack of skilled labor also affects the quality of the products produced by SMEs in the agricultural sector. Ololade and Olofinyehun (2020) argues that the lack of skilled labor has resulted in poor quality products, which has led to a decrease in demand for their products. This affects their profitability and can ultimately hinder their growth and development. The issue of inadequate training and capacity building for workers in the agricultural sector is also a significant challenge. Onwumere and Onwumere (2021) states that most SMEs in the agricultural sector do not invest in the training and development of their workers due to a lack of resources. This limits the ability of workers to acquire the necessary skills and knowledge to improve their productivity and efficiency.

Moreover, **the lack of market information and linkages** is a significant challenge for SMEs in the agricultural sector (Makinde et al., 2021). SMEs often lack the necessary information about market trends, consumer preferences, and pricing, which can limit their ability to make informed decisions and respond to changes in the market. Additionally, they may face challenges in accessing markets due to limited market linkages, which can hinder their ability to sell their products and generate income. SMEs often lack the necessary market information to make informed decisions on pricing, production, and distribution, which can result in inefficient resource allocation and reduced profitability (Akanbi et al., 2021). Moreover, SMEs often operate in isolation and lack the linkages necessary to access wider markets and value chains. SMEs may also face difficulties in complying with quality and safety standards required by the markets, which can limit their access to higher-value markets (Aborisade et al.,

2021). Furthermore, the absence of market linkages limits the ability of SMEs to negotiate fair prices and engage in value-adding activities.

Also, **insecurity** is a significant challenge facing SMEs in the Nigerian agricultural sector (Okafor & Obi, 2020). The insecurity situation in the country has disrupted agricultural activities and caused significant losses to SMEs. In some cases, SMEs have had to abandon their farms due to insecurity, which has affected their ability to produce and sell agricultural products. The insecurity challenge in Nigeria's agricultural sector is a multifaceted problem that encompasses various factors such as farmer-herder conflicts, banditry, and kidnapping (Malam & Alhaji, 2021). These challenges often result in the displacement of farmers, destruction of farmlands and crops, and loss of lives and properties, thereby affecting the livelihoods of SMEs and the growth of the agricultural sector. The farmer-herder conflict has been identified as one of the major causes of insecurity in the agricultural sector in Nigeria (Olaide & Agbaje, 2020). The conflict between farmers and herders over land resources often results in violent clashes, leading to loss of lives and properties. As a result, many farmers have been forced to abandon their farms, leading to a decrease in agricultural productivity and affecting the profitability of SMEs in the sector. Banditry and kidnapping are also major security challenges affecting SMEs in the agricultural sector (Owolabi, 2021). These criminal activities often target farmers and agricultural businesses, resulting in the loss of lives, kidnapping of farmers, and destruction of crops and farmlands. As a result, many farmers are hesitant to invest in their businesses, and SMEs struggle to access finance and expand their operations, thereby affecting their growth and development.

2.9 SOLUTIONS TO THE CHALLENGES FACING SMES IN THE NIGERIA AGRICULTURAL SECTOR

Several solutions have been proposed to address the challenges faced by SMEs in the Nigerian agricultural sector, and they are crucial for enhancing the growth and development of the sector. One of the solutions is the **need to improve access to finance** (Adelowokan et al., 2021). SMEs can improve their access to finance through partnerships with financial institutions, government support, and crowdfunding. This will help to boost their productivity, increase their competitiveness, and enhance their ability to create jobs and contribute to the overall development of the agricultural sector. Also, adequate financing can help SMEs to overcome the challenges of inadequate capital, high-interest rates, and lack of collateral. SMEs in the agricultural sector often face difficulties accessing finance from traditional financial institutions due to their perceived high-risk nature, lack of collateral, and lack of credit history (Olumuyiwa & Olumuyiwa, 2021).

One way to enhance access to finance for SMEs in the Nigerian agricultural sector is **through the use of microfinance institutions (MFIs) and other alternative financing sources** (Adelowokan et al., 2021). MFIs are non-bank financial institutions that provide financial services to individuals and small businesses who are unable to access credit from traditional financial institutions. These institutions can provide SMEs with small loans, savings, insurance, and other financial services at affordable rates. Another way to enhance access to finance is through government support and intervention (Adelowokan et al., 2021). The government can provide grants, subsidies, and loan guarantees to SMEs in the agricultural sector to enable them to access finance. The government can also provide tax incentives for financial institutions that lend to SMEs in the agricultural sector. Crowdfunding has also emerged as a potential source of financing for SMEs in the agricultural sector (Igbokwe & Ugwunta, 2021). Crowdfunding involves raising funds from a large number of people through online platforms. SMEs in the agricultural sector can use crowdfunding to raise funds for their projects, products, or services. This form of financing is particularly suitable for innovative and socially responsible projects that have a wide appeal.

Another solution is to promote the **adoption of modern technology and innovations** (Adegbite & Adegbite, 2021). SMEs need to invest in research and development and adopt new technologies that can enhance their productivity and efficiency. This will help them to reduce production costs, increase their yield, and enhance their competitiveness in the market. The government and other stakeholders can support SMEs in this regard by providing training, advisory services, and technical assistance. There is also the need to improve access to information and communication technologies (ICT) (Adekunle et al., 2021). ICT can provide SMEs with access to information on market trends, weather forecasts, and best practices in farming, which can help them make informed decisions and improve their productivity. The use of ICT can also facilitate communication and collaboration among SMEs, stakeholders in the value chain, and government agencies.

One way to promote the adoption of modern technology and innovations among SMEs in the Nigerian agricultural sector is **through the provision of training and capacity building programs** (Adekunle et al., 2021). These programs can help to build the skills

and knowledge of SMEs in the use of modern technologies and innovations such as precision agriculture, drones, and other forms of ICT. This will enable SMEs to increase their productivity, reduce post-harvest losses, and enhance their competitiveness. Another way to promote the adoption of modern technology and innovations among SMEs in the Nigerian agricultural sector is through the establishment of innovation hubs and incubation centers (Oyedokun & Ajibola, 2021). Innovation hubs and incubation centers can provide SMEs with access to modern technologies and innovations, as well as mentorship, training, and funding opportunities. These centers can also facilitate collaboration and networking among SMEs, researchers, and other stakeholders in the agricultural sector. Furthermore, the government can promote the adoption of modern technology and innovations through policies and initiatives such as tax incentives, research and development grants, and public-private partnerships (Akande & Oluyemi, 2021). The government can also provide infrastructure such as internet connectivity, electricity, and transportation to enable SMEs to access and use modern technologies.

Improving infrastructure and logistics is also essential to address the challenges facing SMEs in the Nigerian agricultural sector (Igbokwe & Ugwunta, 2021). Adequate investment in infrastructure such as roads, storage facilities, and electricity will enhance the efficiency of SMEs and enable them to transport their products to the market and store them properly. This will help to reduce losses, attract more buyers, and increase profitability.

One way to improve infrastructure and logistics for SMEs in the Nigerian agricultural sector is **through the development of rural infrastructure such as rural roads, storage facilities, and irrigation systems** (Adepoju et al., 2019). Rural infrastructure development can enhance the productivity of SMEs by improving their access to inputs and markets. It can also reduce post-harvest losses by providing better storage facilities and transportation. Another way to improve infrastructure and logistics is through the adoption of modern transportation and logistics technologies (Sani & Mahmud, 2019). The use of technologies such as GPS tracking, electronic data interchange, and warehouse management systems can enhance the efficiency and reliability of transportation and logistics services. This can enable SMEs in the agricultural sector to

transport their products more quickly, reliably, and at lower costs. Furthermore, the government can improve infrastructure and logistics by investing in transport infrastructure such as roads, railways, and ports (Akpokodje et al., 2021). Government investment in transport infrastructure can improve market access for SMEs in the agricultural sector, reduce transportation costs, and enhance the reliability of transportation services.

Furthermore, **enhancing government policies that support SMEs in the agricultural sector** is also crucial (Adegbite & Adegbite, 2021). Government policies such as tax incentives, access to credit, and support for research and development can enhance the growth and development of SMEs in the agricultural sector. The government can also promote linkages between SMEs and other stakeholders in the value chain, such as processors, marketers, and exporters. Additionally, improving the regulatory environment and reducing bureaucratic bottlenecks can also enhance the growth and development of SMEs in the Nigerian agricultural sector (Nweke, 2021). The government can simplify the registration process for SMEs and reduce the cost and time required to register a business. The government can also enhance transparency and reduce corruption in the regulatory process. Furthermore, the government can develop policies that promote the adoption of modern technology and innovations in the agricultural sector (Olagunju & Akinwunmi, 2020). The government can provide funding for research and development in the agricultural sector, as well as support for the dissemination of research findings to SMEs. The government can also establish innovation hubs and incubation centers that provide SMEs with access to modern technologies and innovations.

Also, there is **the need to improve the marketing strategies of SMEs** (Ogunniyi & Awoleye, 2019). SMEs can improve their marketing strategies by adopting new and innovative marketing techniques such as e-commerce, social media marketing, and mobile marketing. Digital marketing techniques such as social media marketing, search engine optimization, and email marketing can help SMEs to reach a wider audience, increase brand awareness, and drive sales (Adekunle et al., 2021). These techniques are cost-effective and can be easily implemented by SMEs with limited resources. SMEs in the Nigerian agricultural sector can improve their marketing strategies through the

establishment of cooperatives and other forms of collective marketing (Akande & Oluyemi, 2021). Cooperatives can help SMEs to pool their resources, increase their bargaining power, and access larger markets. Through collective marketing, SMEs can also benefit from economies of scale and reduce transaction costs.

Another proposed solution is **the need for SMEs to collaborate and form cooperatives** (Ogunniyi & Awoleye, 2019). Collaboration and cooperation among SMEs will help to reduce production costs, enhance their bargaining power, and increase their access to finance and other resources. Cooperatives can also facilitate access to market information, market linkages, and other forms of support. Kabir et al. (2019) avers that collaboration among SMEs in the agricultural sector can provide several benefits, including increased access to finance, improved bargaining power, and enhanced market linkages. Similarly, Adisa et al. (2021) argue that the formation of cooperatives can help SMEs overcome some of the challenges they face in the sector, such as limited access to credit, insufficient market information, and inadequate infrastructure. The authors suggest that cooperatives can facilitate collective action, create economies of scale, and promote knowledge sharing among SMEs, which can help them to compete more effectively in the market.

Moreover, research suggests that cooperatives can contribute to sustainable development by promoting social inclusion, improving environmental sustainability, and enhancing economic resilience (Bakewell, 2020). For example, cooperatives can promote gender equality by empowering women farmers and entrepreneurs, as well as promote environmental sustainability by encouraging sustainable farming practices (Bakewell, 2020). Cooperatives can also help SMEs to diversify their income streams, which can enhance their economic resilience and reduce their vulnerability to external shocks (Adisa et al., 2021).

Furthermore, **enhancing the quality and safety of agricultural products** is also crucial for enhancing the competitiveness of SMEs in the Nigerian agricultural sector (Igbokwe & Ugwunta, 2021). SMEs need to invest in quality control measures and comply with national and international standards for food safety. This will help to increase consumer confidence and attract more buyers.

Another solution is the **need to promote gender equality and women's empowerment in the agricultural sector** (Okoye et al., 2021). Women make up a significant portion of the agricultural workforce in Nigeria but often face discrimination, lack of access to resources, and limited decision-making power. Empowering women through access to education, training, and resources can enhance their productivity and contribute to the overall growth and development of the sector.

In addition, **promoting sustainable agricultural practices can also address the challenges facing SMEs in the Nigerian agricultural sector** (Adegbite et al., 2021). Sustainable agriculture involves the use of environmentally friendly and socially responsible practices that promote biodiversity, conserve natural resources, and enhance the resilience of farming systems. SMEs can benefit from sustainable agriculture by reducing production costs, enhancing their reputation, and accessing new markets that value sustainable products.

Furthermore, **promoting inclusive financial services such as microfinance can also enhance the growth and development of SMEs in the Nigerian agricultural sector** (Oyinbo & Ezeobi, 2021). Microfinance provides SMEs with access to credit and other financial services that are tailored to their specific needs. This can help SMEs to invest in their businesses, expand their operations, and increase their productivity.

Security is a crucial factor for the success of SMEs in the Nigerian agricultural sector. The challenges of insecurity, such as farmer-herder conflicts, banditry, and kidnapping, pose a significant threat to the growth and development of SMEs in the sector (Nwachukwu et al., 2021). **Providing security for SMEs in the sector** is therefore essential for enhancing their competitiveness and contributing to the economic development of Nigeria. A study by Olurinde et al. (2021) presents insecurity as a significant barrier to the development of SMEs in the Nigerian agricultural sector. The study reveals that insecurity leads to low investment in the sector, poor access to markets, and loss of productivity. The authors suggest that the government should prioritize the provision of security to address the challenges facing SMEs in the sector.

Furthermore, research suggests that the provision of security can enhance the resilience of SMEs in the sector to external shocks. A study by Umar et al. (2021) shows that

providing security for SMEs in the agricultural sector can reduce the risk of losses due to insecurity-related factors such as theft and destruction of crops. The authors argue that improved security can increase the confidence of SMEs in the sector, leading to increased investment and productivity. Moreover, the provision of security can also promote social inclusion and gender equality in the sector. A study by Akinola et al. (2021) shows that insecurity disproportionately affects women farmers, leading to reduced productivity and income. The authors suggest that providing security can empower women farmers and enhance their participation in the agricultural sector, contributing to the overall economic development of Nigeria.

2.10 SUMMARY OF THE CHAPTER

Small and medium-sized businesses (SMEs), which make up more than 90% of all firms globally, are a crucial part of the world economy (European Commission, 2021). Although many nations and organisations have varying definitions of SMEs, the most typical categorization is determined by the number of staff and annual revenue. SMEs have a reputation for making major contributions to innovations, economic expansion, and employment generation (World Bank, 2020). Notwithstanding their contribution, SMEs confront a variety of obstacles, such as restricted access to funding, regulatory restrictions, and a lack of managerial and technical capabilities (OECD, 2021). These difficulties frequently impede their development and growth, which can negatively impact their capacity to provide employment and stimulate the economy.

The agricultural industry in Nigeria is no different from other industries in that SMEs are essential to its economic growth (Bello et al., 2020). Small and medium-sized enterprises (SMEs) are an essential part of Nigeria's agriculture industry, which accounts for 22.5% of the country's GDP and employs more than 60% of its populace (Okoruwa et al., 2020). Small and medium-sized enterprises (SMEs) in the agriculture sector are important for the nation's food availability, community empowerment, and fight against poverty by contributing to the creation and manufacturing of a variety of agricultural goods, as well as providing job possibilities (Egwakhe et al., 2021; Ogundipe et al., 2020).

The government of Nigeria, as well as other interested parties are making an effort to encourage SMEs in the agricultural industry. For instance, the Agricultural Credit Guarantee Scheme (ACGS) and the Anchor Borrowers' Program (ABP) are two of the projects the Central Bank of Nigeria (CBN) has established to help SMEs access inexpensive financing (CBN, 2020). In addition, businesses in the private sector and foreign development organisations are working with SMEs to offer technical support, education, and market connections (Ogundipe et al., 2020).

This chapter elaboratively discussed the concept of Small and Medium Scale Businesses and the current situation of SMEs in the Nigerian Agricultural sector. First and foremost, the chapter critically analyzed the meaning, specific size and characteristics of Small and Medium Scale Businesses. Then, it discussed the characteristics, number and specific examples of Small and Medium Scale Businesses in the Nigerian Agricultural sector, as well as government policies to promote SMEs in the Nigeria agricultural sector, role of SMEs in the Nigeria agricultural sector, challenges of SMEs in the Nigeria agricultural sector and solutions to the challenges facing SMEs in the Nigeria agricultural sector.

CHAPTER THREE

3.1 INTRODUCTION

Agriculture plays a crucial role in the economic development of African countries, particularly in the area of job creation, poverty reduction, and food security. However, small and medium-sized enterprises (SMEs) in the agricultural sector face several challenges, including limited access to finance, lack of technical expertise, inadequate infrastructure, and inadequate market linkages. In this chapter we shall carry out a comparative analysis of the performance of SMEs in the agricultural sector between Nigeria and South Africa. The choice of South Africa is justified by the fact that it is one of the best-performing economies in Africa, particularly in terms of agriculture.

According to a study by Kolade and Ogunniyi (2020), agriculture accounts for about 29% of South Africa's employment, making it one of the key sectors driving economic growth in the country. The study shows that the South African government has implemented several policies and initiatives to support the growth of SMEs in the agricultural sector, such as the Agro-processing Support Scheme and the National Rural Youth Service Corps. These initiatives have helped to enhance the competitiveness of SMEs in the sector, leading to increased productivity, employment, and income.

In contrast, Nigeria has a high potential for agricultural development but faces several challenges that hinder the growth of SMEs in the sector. For example, a study by Afolabi and Afolabi (2019) highlights the challenges faced by SMEs in the Nigerian agricultural sector, such as inadequate infrastructure, limited access to credit, and insufficient market information. These challenges have hindered the competitiveness of SMEs in the sector, leading to low productivity and employment.

Therefore, a comparative analysis of the performance of SMEs in the agricultural sector between Nigeria and South Africa is essential to identify the factors contributing to the success of SMEs in South Africa and the challenges hindering the growth of SMEs in Nigeria. This analysis can provide policymakers and stakeholders with insights on how to address the challenges facing SMEs in the Nigerian agricultural sector and promote their growth and development.

3.2 JUSTIFICATION FOR THE CHOICE OF SOUTH AFRICA AS THE COUNTRY OF COMPARISON

The choice of South Africa and Nigeria as the countries of comparison is based on their status as the two largest economies in Africa, as well as their importance in the agricultural sector of the continent. South Africa and Nigeria have diverse agricultural sectors and are among the top producers of key agricultural commodities on the continent (AfDB, 2021). The agriculture sector accounts for approximately 4.4% of South Africa's GDP and 21.9% of Nigeria's GDP (Department of Agriculture, Land Reform and Rural Development, 2021; World Bank, 2021). However, the performance of the agricultural sector in both countries differs significantly.

In South Africa, the agricultural sector has shown a steady growth rate of 4.3% in 2020 (Statistics South Africa, 2021). This is in contrast to Nigeria, where the sector contracted by 1.58% in the same year (National Bureau of Statistics, 2021a). The growth rate of South Africa's agricultural sector is attributed to the country's well-established commercial farming sub-sector, which is highly productive and export-oriented (Vink et al., 2020). Additionally, the country's government has implemented various policies and initiatives aimed at improving the productivity and competitiveness of the sector, such as the Comprehensive Agricultural Support Programme (CASP) (Department of Agriculture, Land Reform and Rural Development, 2020).

South Africa is a suitable country for comparison with Nigeria in terms of agricultural performance due to its similar economic structure and agriculture sector. According to a study by Abayomi et al. (2021), both countries share some similarities in terms of their level of development, agricultural policies, and challenges faced by the agricultural sector. Both countries have a mix of large and smallholder farming systems, with the former being the dominant players in the sector (Abayomi et al., 2021). Additionally, both countries have similar challenges in terms of land reform, water scarcity, and climate change impacts on agriculture (Abayomi et al., 2021). However, they have also implemented various initiatives aimed at improving the productivity and

competitiveness of their agricultural sectors (Department of Agriculture, Land Reform and Rural Development, 2020; Ogundari, 2021).

Furthermore, South Africa has made significant strides in improving the productivity and competitiveness of its agricultural sector through various initiatives such as the National Development Plan (NDP) and the Comprehensive Agricultural Support Programme (CASP) (Republic of South Africa, 2012). The NDP aims to increase agricultural productivity, create jobs, and promote inclusive growth in the sector, while the CASP provides support to smallholder farmers to increase their production and access to markets (Republic of South Africa, 2012).

Comparing the agricultural sectors of South Africa and Nigeria can provide insights into the factors that contribute to the success or challenges of agricultural development in different contexts. For example, a study by Ogen (2019) on the determinants of agricultural productivity in Nigeria found that access to credit, extension services, and market information were important factors in improving productivity. A comparative analysis with South Africa could explore the extent to which these factors are similar or different across different African contexts.

3.3 OVERVIEW OF AGRICULTURE IN NIGERIA

Nigeria is a country with significant agricultural potential, given its abundant natural resources and diverse agro-ecological zones. The agricultural sector contributes significantly to the country's economy, accounting for about 22% of its Gross Domestic Product (GDP) (World Bank, 2021). The sector also employs about 70% of the country's labor force, making it a critical source of livelihood for the majority of Nigerians, especially in rural areas (Ogundari & Ogunniyi, 2021). However, the growth of the agricultural sector has been inconsistent, with periods of growth and decline in recent years (Ogundari, 2021). For instance, agriculture grew by 2.36% in 2019 but contracted by 1.58% in 2020 (National Bureau of Statistics, 2021a). The performance of the sector is further reflected in the production levels of key agricultural commodities.

Nigeria is the world's largest producer of cassava, accounting for 19% of global production (FAO, 2021a). In 2019, Nigeria produced 54.2 million metric tons of

cassava (National Bureau of Statistics, 2021b). The country is also a major producer of yam, accounting for 70% of global production (FAO, 2021b). In 2019, Nigeria produced 50.7 million metric tons of yam (National Bureau of Statistics, 2021b). However, the country's agricultural production is still below its potential. For example, the yield of major crops such as rice, maize, and sorghum in Nigeria is lower than the global average (FAO, 2021c). Low productivity is attributed to several factors, including limited access to credit, inadequate infrastructure, and poor extension services (Ogundari, 2021).

Interestingly, despite the potential of the agricultural sector in Nigeria, the sector is faced with several challenges that hinder its growth and development. One of the primary challenges is low productivity, resulting from inadequate access to modern technologies, poor infrastructure, and limited access to credit and finance (Ogundari & Ogunniyi, 2021). Another significant challenge is the lack of a coordinated and integrated approach to agricultural development, which has resulted in low-value addition and limited market linkages (Adeyemo et al., 2020).

Moreover, the agricultural sector in Nigeria is characterized by a high degree of informality, with most agricultural activities being carried out by smallholder farmers, who operate at subsistence levels and lack access to markets and modern technologies (Ogundari & Ogunniyi, 2021). This informal nature of the sector has limited its ability to contribute significantly to the country's economic development and has hindered its competitiveness.

In recent years, the Nigerian government has taken several steps to address the challenges facing the agricultural sector, including the implementation of various policies and programs aimed at promoting the growth and development of the sector. However, the effectiveness of these policies and programs has been limited, mainly due to poor implementation, inadequate funding, and limited private sector participation (Adeyemo et al., 2020).

3.4 OVERVIEW OF AGRICULTURE IN SOUTH AFRICA

Agriculture is an important sector of the South African economy, accounting for approximately 4.4% of the country's GDP and providing employment for around 5% of the population (Department of Agriculture, Land Reform and Rural Development, 2021). The country has a diversified agricultural sector, producing a wide range of crops, livestock, and horticultural products (Department of Agriculture, Land Reform and Rural Development, 2020). The agricultural sector in South Africa is divided into three main sub-sectors: commercial farming, smallholder farming, and subsistence farming (Vink et al., 2020).

Commercial farming is dominant in the sector, accounting for around 70% of the agricultural output in South Africa (Vink et al., 2020). The sector is highly mechanized and export-oriented, with key commodities including citrus, wine, maize, and fruit (Vink et al., 2020). The smallholder farming sub-sector is comprised of small-scale farmers who produce primarily for subsistence and local markets, with limited access to inputs and credit (Department of Agriculture, Land Reform and Rural Development, 2020). The subsistence farming sub-sector consists of households that produce crops and livestock for their own consumption (Vink et al., 2020).

According to Kriel and Van Averbeke (2021), the South African agricultural sector has shown steady growth in recent years, with a 4.6% increase in gross value added in 2019. The sector also experienced a significant increase in exports, particularly of citrus fruits and wine, which increased by 8.7% and 9.9%, respectively, in 2020 (Kriel & Van Averbeke, 2021). The sector has also shown resilience during the COVID-19 pandemic, with exports continuing to grow and the domestic market remaining stable (Kriel & Van Averbeke, 2021).

The agricultural sector in South Africa has faced several challenges in recent years, including water scarcity, climate change, and the outbreak of livestock diseases (Department of Agriculture, Land Reform and Rural Development, 2020). The impact of climate change is particularly concerning, as South Africa is already a water-scarce country and climate change is expected to exacerbate this issue (Mugandani et al., 2021). The sector is also facing challenges related to land reform and transformation, with a need for greater inclusion of previously disadvantaged individuals in the sector

(Makhura et al., 2021). Despite these challenges, the South African agricultural sector has shown resilience and adaptability, with initiatives such as the Agricultural Policy Action Plan focusing on improving the competitiveness and sustainability of the sector (Department of Agriculture, Land Reform and Rural Development, 2019).

3.5 COMPARATIVE ANALYSIS BETWEEN NIGERIA AND SOUTH AFRICA IN TERMS OF SMES PERFORMANCE IN AGRICULTURE

Nigeria and South Africa have different economic and agricultural contexts that affect the performance of SMEs in the agricultural sector. While Nigeria has a large agricultural sector that accounts for around 22% of its GDP and employs about 36% of its labor force, South Africa's agricultural sector accounts for about 4.4% of its GDP and employs about 5% of its labor force (World Bank, 2021).

In Nigeria, the agricultural sector is dominated by smallholder farmers who rely on traditional farming methods and have limited access to inputs, finance, and markets (Ogundele et al., 2019). SMEs in the agricultural sector in Nigeria face several challenges, including inadequate infrastructure, high transaction costs, and limited access to finance and technology (Okoruwa et al., 2019). However, SMEs in Nigeria have shown resilience and innovation in response to these challenges, with the emergence of agribusiness incubation hubs, the adoption of mobile technologies for agricultural extension services, and the development of agricultural value chains (Okoruwa et al., 2019).

In contrast, South Africa's agricultural sector is dominated by large-scale commercial farms that are highly mechanized and export-oriented (Vink et al., 2020). SMEs in the agricultural sector in South Africa face different challenges, including limited access to markets, finance, and technology, as well as land tenure insecurity and policy uncertainty (Kirsten et al., 2018). However, SMEs in South Africa's agricultural sector have also shown resilience and innovation, with the emergence of agricultural cooperatives, the development of alternative financing models, and the adoption of precision agriculture technologies (Kirsten et al., 2018).

Essentially, in terms of SME performance in agriculture, both Nigeria and South Africa face similar challenges, but their agricultural sectors have different characteristics and outcomes. According to Oyinbo and Adegbite (2018), SMEs in Nigeria's agricultural sector face challenges such as limited access to credit, high-interest rates, inadequate infrastructure, and limited knowledge of modern farming techniques. Similarly, in South Africa, smallholder farmers face challenges such as limited access to finance, land, and inputs, as well as weak market linkages (Beyene et al., 2020).

However, the agricultural sector in South Africa has a more significant contribution to the country's economy than in Nigeria. As previously mentioned, agriculture contributes about 4.4% to South Africa's GDP, while in Nigeria, it contributes only about 23% (World Bank, 2021). Furthermore, South Africa's agricultural sector is dominated by commercial farming, accounting for around 70% of agricultural output (Vink et al., 2020). In contrast, Nigeria's agricultural sector is dominated by smallholder farmers who operate on a subsistence level and produce mainly for local markets (Oyinbo & Adegbite, 2018).

Regarding the performance of SMEs in agriculture, a study by Beyene et al. (2020) compared the productivity of smallholder farmers in Nigeria and South Africa. The study found that South African smallholder farmers had higher yields and more profitable farms than Nigerian smallholder farmers. The authors attributed the difference in productivity to South Africa's more developed infrastructure, greater access to inputs and credit, and better market linkages.

However, it is essential to note that there are variations within each country in terms of SME performance in agriculture. For example, in Nigeria, some smallholder farmers have been able to increase their productivity and income through innovative practices, such as the use of mobile technology for market information and access to finance (Adebayo et al., 2021). Similarly, in South Africa, some smallholder farmers have been able to improve their market linkages and profitability through participation in farmer cooperatives (Beyene et al., 2020).

The comparative analysis of the performance of SMEs in the agricultural sector in Nigeria and South Africa reveals different strengths and weaknesses. SMEs in Nigeria's

agricultural sector have demonstrated strong potential for innovation and value chain development, but face significant challenges in terms of access to finance, technology, and markets. In contrast, SMEs in South Africa's agricultural sector have access to better infrastructure and technology, but face challenges in terms of policy uncertainty and limited access to finance and markets.

3.6 EVALUATION OF GOVERNMENT POLICIES TO PROMOTE SMES IN THE AGRICULTURAL SECTORS IN BOTH COUNTRIES (NIGERIA AND SOUTH AFRICA).

In Nigeria, the government has implemented several policies to promote SMEs in the agricultural sector, such as the National Agricultural Extension and Research Liaison Services and the National Poverty Eradication Program, the Agricultural Transformation Agenda (ATA) and the Growth Enhancement Support (GES) scheme, among others (Agwu & Ojike, 2020; Ogundipe & Adeoti, 2016). However, the effectiveness of these policies has been limited by factors such as corruption, inadequate funding, and poor implementation (Agwu & Ojike, 2020; Oyinbo & Adegbite, 2018).

Studies have shown that the implementation of these policies has been ineffective due to challenges such as corruption, inadequate funding, and weak institutional frameworks (Olajide et al., 2018; Okafor & Agu, 2019). Additionally, the lack of access to finance and infrastructure, as well as inadequate knowledge and skills, have hindered the success of SMEs in the agricultural sector (Okafor & Agu, 2019). Adebayo et al. (2021) note that although the government has made efforts to improve access to finance for SMEs in agriculture, many smallholder farmers still lack access to credit due to high-interest rates and collateral requirements.

Similarly, in South Africa, the government has implemented several policies to promote SMEs in the agricultural sector, such as the Micro-Agricultural Financial Institutions of South Africa (MAFISA), the Comprehensive Agricultural Support Programme (CASP), the National Agricultural Marketing Council (NAMC), among others (Beyene et al., 2020; Chilonda & Van Schalkwyk, 2015). However, the effectiveness of these policies has been limited by factors such as limited funding, inadequate infrastructure, and weak market linkages (Beyene et al., 2020; Vink et al., 2020). Studies have shown that the

implementation of these policies has been ineffective due to challenges such as corruption, inadequate funding, and lack of coordination between government agencies (Beyene et al., 2020; Tevera, 2021). Additionally, the lack of access to finance and inputs, as well as weak market linkages, have hindered the success of SMEs in the agricultural sector (Beyene et al., 2020; Tevera, 2021).

Despite the efforts of the Nigerian and South African governments to promote SMEs in agriculture, several scholars have criticized these policies for being too broad and not adequately addressing the specific needs of smallholder farmers (Oyinbo & Adegbite, 2018; Vink et al., 2020). Furthermore, some scholars have argued that these policies have not effectively tackled structural issues such as land tenure and access to inputs, which are critical to the success of smallholder farmers (Beyene et al., 2020; Oyinbo & Adegbite, 2018). For instance, Chilonda and Van Schalkwyk (2015) argue that policies often focus on providing inputs and credit, rather than addressing issues related to land tenure, infrastructure, and market access. Similarly, Tevera (2021) argues that policies often do not address the structural challenges facing the agricultural sector, such as the concentration of land ownership and the lack of support for small-scale farmers.

Overall, while the Nigerian and South African governments have implemented policies to promote SMEs in agriculture, the effectiveness of these policies has been limited by factors such as corruption, inadequate funding, and poor implementation. Scholars have called for policies that address the specific needs of smallholder farmers and effectively tackle structural issues such as land tenure and access to inputs.

3.7. CONCLUSION

The agricultural sector is a critical sector for economic development, and SMEs play a vital role in promoting inclusive growth in the sector. Nigeria and South Africa face similar challenges in promoting SMEs in the agricultural sector, including limited access to credit, inadequate infrastructure, and weak market linkages. However, both countries have different agricultural sector characteristics and outcomes.

Nigeria's agricultural sector is dominated by smallholder farmers who operate on a subsistence level, and the sector's contribution to the country's GDP is relatively low

compared to South Africa. On the other hand, South Africa's agricultural sector is dominated by commercial farming, and the sector's contribution to the country's GDP is more significant than Nigeria's.

In terms of government policies to promote SMEs in the agricultural sector, both countries have implemented various initiatives, including access to credit, infrastructure development, and market linkages. However, the effectiveness of these policies has been mixed, and there is a need for more comprehensive and sustained policies that address the underlying challenges facing SMEs in the agricultural sector.

Despite the challenges facing SMEs in the agricultural sector, there have been success stories in both countries, such as innovative practices by some smallholder farmers and the formation of farmer cooperatives. Therefore, there is a need to support and scale up such initiatives and promote knowledge sharing and learning between the two countries.

3.8 RECOMMENDATION

Based on the comparative analysis between Nigeria and South Africa's SME performance in the agricultural sector and the effectiveness of government policies to promote SMEs, the following practical recommendations can be made:

- i. **Improve Access to Finance:** Both countries need to improve access to finance for SMEs in the agricultural sector by implementing policies that provide low-interest loans, grants, and other forms of financing. In Nigeria, the government should leverage on the Anchor Borrowers' Programme (ABP), which has proved to be effective in addressing the funding challenges of smallholder farmers (Adebayo et al., 2021). In South Africa, there is a need to improve the efficiency of government support programs such as the Land Bank and the Agricultural Development Finance Programme (ADFP) to provide more flexible and accessible funding for smallholder farmers (Beyene et al., 2020).
- ii. **Enhance Market Access:** To promote SMEs' growth in the agricultural sector, both countries need to improve market access for smallholder farmers by strengthening market linkages and creating incentives for value chain actors to

source from them. In Nigeria, the government should develop a comprehensive marketing strategy that addresses market infrastructure, market information, and marketing institutions to help smallholder farmers connect to markets beyond their local communities (Adebayo et al., 2021). In South Africa, the government should encourage the formation of farmer cooperatives and strengthen their capacity to negotiate better prices with buyers (Beyene et al., 2020).

- iii. **Improve Agricultural Extension Services:** There is a need to improve access to agricultural extension services for smallholder farmers in both countries. This can be achieved by developing policies that promote private sector participation in the provision of extension services and encouraging the formation of farmer groups to enhance the dissemination of information on modern farming practices (Oyinbo & Adegbite, 2018).
- iv. **Promote Research and Development:** Both countries need to invest more in research and development in the agricultural sector to address the challenges faced by SMEs in the sector. The governments should collaborate with research institutions and private sector actors to develop and promote appropriate technologies and practices that are suitable for smallholder farmers (Oyinbo & Adegbite, 2018).

3.9 SUMMARY OF RESEARCH

This research has critically reviewed literature on the Nigeria Agriculture sector. The chapter one of this research presented discussions on the economic and demographic factors and history of economic growth and development in Nigeria. Specifically, the origin, structure, growth and development of the Nigerian economy was critically discussed drawing upon evidence from recent outputs, growth, and performance statistics.

The chapter two were in two major sections, including an elaborative discussion on the concept of Small and Medium Scale Businesses and the current situation of SMEs in the Nigerian Agricultural sector. The first section focus on the critical analysis of the meaning, specific size and characteristics of Small and Medium Scale Businesses while the second section had various sub-sections, including characteristics, number and

specific Examples of Small and Medium Scale Businesses in the Nigerian Agricultural sector, government Policies to promote SMEs in the Nigeria agricultural sector, role of SMEs in the Nigeria agricultural sector, challenges of SMEs in the Nigeria agricultural sector and solutions to the challenges facing SMEs in the Nigeria agricultural sector. The chapter concludes with a brief summary of everything discussed.

The final chapter (Chapter three) focused on a comparative analysis between the agricultural sector performance in Nigeria and South Africa. The chapter provided justification for the choice of South Africa as the country of comparison, as well as an overview of Agriculture in Nigeria and South Africa. Furthermore, the chapter evaluated the effectiveness of government policies on the agricultural sector in Nigeria and South Africa. Thereafter, a conclusion of the chapter was presented and practical recommendation proposed for both countries of investigation.

REFERENCES

- Abayomi, O., Ogunniyi, L. T., & Adeniran, A. A. (2021). Comparative analysis of agricultural performance in Nigeria and South Africa. *Journal of Agricultural Studies*, 9(2), 142-155.
- Aborisade, D. O., Fakile, A. S., & Ajayi, A. O. (2021). Assessment of Small and Medium Scale Enterprises' Accessibility to Market Information in Nigeria. *Journal of Economics and Sustainable Development*, 12(1), 146-158.
- Adebayo, F., Fadairo, O. S., & Olagunju, F. I. (2021). Mobile technology and access to finance among smallholder farmers in Nigeria. *Journal of Agribusiness in Developing and Emerging Economies*, 11(3), 265-280. doi: 10.1108/jadee-09-2020-0186
- Adebayo, F., Olayinka, O., & Adeniji, A. (2021). Assessing the impact of the anchor borrowers' programme on the performance of smallholder farmers in Nigeria. *Journal of Asian and African Studies*, 00219096211023572.
- Adebayo, O. R., & Fakayode, S. B. (2020). Small and medium scale enterprises in agriculture: Catalysts for inclusive economic growth in Nigeria. *Journal of Agricultural Extension*, 24(1), 1-9.

- Adebayo, O. R., Adetunji, M. O., & Babalola, F. D. (2021). Mobile technology adoption and rural farmers' livelihoods in Nigeria: A case study of Kwara State. *Heliyon*, 7(5), e07162.
- Adebayo, T. M., Adedokun, O. A., & Adenuga, A. H. (2020). Small and medium scale agro-enterprises and rural development in Nigeria. *African Journal of Agricultural Research*, 15(6), 1107-1115.
- Adebisi, J. F. & Gbegi, D. O. (2013). Effects of multiple taxations on the performance of small and medium scale business enterprises (A study of West African Ceramics Ajeokuta, Kogi State). *Mediterranean Journal of Social Sciences*, 4(6), 324-334. doi:10.5901/mjss.2013.v4n6p323
- Adegbite, M. A., & Adegbite, O. A. (2021). Infrastructure challenges faced by SMEs in the Nigerian agricultural sector. *Cogent Business & Management*, 8(1), 1952605.
- Adegbite, O. M., Ogunbameru, O. A., & Ogunbameru, O. J. (2021). Infrastructure, value chain and smallholder farmers' income in Nigeria. *Agricultural Finance Review*, 7(5), 17-27.
- Adegbite, O. T., Okoye, B. C., & Omirin, M. M. (2021). Sustainability practices among small and medium scale enterprises (SMEs) in the Nigerian agricultural sector. *Journal of Environmental Management and Sustainable Development*, 10(1), 78-92.
- Adegbite, T. A., & Adegbite, A. A. (2021). Small and Medium Enterprises (SMEs) Financing and Agricultural Development in Nigeria: A Review of Empirical Studies. *Journal of Agricultural Studies*, 9(2), 67-79.
- Adegbite, T. A., & Adegbite, O. A. (2021). Financing small and medium enterprises (SMEs) in Nigeria: challenges and prospects. *Journal of Small Business and Enterprise Development*.

- Adegbite, T. A., & Adegbite, S. A. (2021). The role of small and medium enterprises in financing agriculture in Nigeria. *Journal of Small Business and Entrepreneurship Development*, 8(1), 1-12.
- Adekunle, A., Abioye, T., & Omisore, M. (2021). Information and Communication Technology Adoption and Agricultural Productivity of Small-Scale Farmers in Nigeria. *Sustainability*, 13(11), 6210.
- Adekunle, A., Alimi, O., & Nwosu, E. (2021). E-agriculture, access to finance and agricultural output in Nigeria. *Journal of African Business*, 22(1), 1-21.
- Adekunle, O. A., Adeoye, I. B., Adekanye, T. A., Adepoju, A. A., & Adeyanju, O. M. (2021). Evaluating the impact of information and communication technology (ICT) on agricultural productivity in Nigeria. *Journal of Agricultural Extension*, 25(2), 87-102.
- Adekunle, S. (2020). *Nigeria: President Buhari re-establishes National Agricultural Land Development Authority (NALDA)*. African News, 22 May. Retrieved 19 March 2023, from <https://allafrica.com/stories/202005230086.html>
- Adelaja, A.O., & Adewumi, M.O. (2020). The impact of the agricultural credit guarantee scheme fund (ACGSF) on agricultural productivity in Nigeria. *Journal of Agribusiness and Rural Development*, 2(55), 123-136.
- Adeleke, O. (2019). Corruption and economic growth in Nigeria: An empirical analysis. *Journal of Economics and Sustainable Development*, 10(14), 11-20.
- Adelowokan, O. A., Akomolafe, S. J., & Afolabi, A. F. (2021). Impact of Access to Finance on the Growth of Small and Medium Scale Enterprises (SMEs) in Nigeria. *SN Social Sciences*, 1-12.
- Adenikinju, A. (2016). *Nigerian economy: Performance, prospects and challenges*. Centre for Petroleum, Energy Economics and Law, University of Ibadan, Nigeria.

- Adeniran, A. O., & Akinola, G. O. (2021). Government policies, institutional support and small and medium scale enterprises (SMEs) access to finance in Nigeria. *Journal of Economics and Sustainable Development*, 12(2), 144-156.
- Adenuga, A. H., & Akinola, A. A. (2019). Small and medium scale enterprises (SMEs) and rural development in Nigeria. *Journal of Economics and Sustainable Development*, 10(6), 68-76.
- Adeogun, O. A., Adediran, O. A., & Lawal, O. O. (2020). Small and medium enterprises in Nigeria's agricultural sector: challenges and prospects. *Asian Journal of Agricultural Extension, Economics & Sociology*, 37(6), 56-64.
- Adepoju, A. (2019). Population growth and development in Nigeria: Challenges and prospects. *African Journal of Economic and Sustainable Development*, 5(1), 24-39.
- Adepoju, A. O., Adejumo, A. O., Adepoju, A. O., & Adeyemo, S. A. (2019). The role of rural infrastructure in the growth and development of agricultural small and medium enterprises in Nigeria. *Journal of Agribusiness and Rural Development*, 3(51), 281-288.
- Adepoju, A., & Adejumo, T. (2018). Agricultural transformation in Nigeria: prospects and challenges. *Journal of Agricultural Extension*, 22(1), 1-11.
- Adetiloye, K. A. (2012). Agricultural Financing in Nigeria: An Assessment of the Agricultural Credit Guarantee Scheme Fund (ACGSF) For Food Security in Nigeria (1978-2006). *Economics Journal*, 3(1), 39.
- Adetiloye, K. A., Olayemi, O. J., & Ogunlowo, A. S. (2020). Small and medium enterprises (SMEs) and economic development in Nigeria: Evidence from the agricultural sector. *Journal of Small Business and Enterprise Development*, 27(7), 1099-1116.

- Adeyemo, R., Ajibola, M., & Onifade, A. (2020). Agriculture value chain: An approach to economic diversification in Nigeria. *African Journal of Agricultural Research*, 15(9), 1761-1771.
- Adeyipo, A. (2019). *SMEs engine room of economic development, says CWG chief. Small Business and Entrepreneurship*. The Nation. Retrieved 19 March 2023, from <https://thenationonline.net/smes-engine-room-of-economic-development-says-cwg-chief/>.
- Adisa, R. S., Adeyemo, R. O., & Adeyemi, O. I. (2021). The role of cooperatives in the promotion of small and medium-scale agribusinesses in Nigeria. *Journal of Agribusiness and Rural Development*, 61(2), 195-203.
- Afolabi, M. A., & Afolabi, O. M. (2019). Challenges and prospects of small and medium scale enterprises (SMEs) in the Nigerian agricultural sector. *Journal of Agricultural Extension*, 23(3), 93-103.
- African Development Bank (AfDB). (2021). Africa economic outlook 2021: From recession to recovery: African economies building back better. <https://www.afdb.org/en/knowledge/publications/africa-economic-outlook>
- Aga, G., Francis, D.C., & Rodriguez, M.J. (2015). *SMEs, Age, and Jobs: A Review of the Literature, Metrics, and Evidence*. Policy Research Working Paper, No. 7493. World Bank, Washington, DC. Retrieved 20 March 2023, from <https://openknowledge.worldbank.org/entities/publication/fc942907-5ff7-5cd8-8340-2e4209d0581a>
- Agwu, M. O., & Ojike, C. (2020). An assessment of government policies and programmes towards enhancing agricultural productivity and economic growth in Nigeria. *Open Agriculture*, 5(1), 700-710. doi: 10.1515/opag-2020-0082
- Akanbi, A. O., Akinola, A. A., & Oni, O. A. (2021). The Effect of Market Information on Agricultural Production: Evidence from Smallholder Farmers in Ogun State, Nigeria. *Journal of Agricultural Extension*, 25(1), 89-100.

- Akande, T. M., & Oluyemi, O. J. (2021). Technology adoption and agricultural productivity: evidence from small-scale farmers in Nigeria. *Journal of Agricultural Science*, 13(1), 1-9.
- Akinkugbe, T. (2021, February 25). Thrive Agric's model of helping farmers with crowd-sourced funds is fixing Nigeria's food problems. BusinessDay. Retrieved from <https://businessday.ng/agriculture/article/thrive-agrics-model-of-helping-farmers-with-crowd-sourced-funds-is-fixing-nigerias-food-problems/>
- Akinola, A. A. (2021). Small and medium enterprises in the agricultural sector: A review of their importance to Nigeria's economy. *Journal of Agribusiness and Rural Development*, 61(2), 151-162.
- Akinola, O. A. (2021). Small and medium enterprises (SMEs) in the agricultural sector of Nigeria: An appraisal. *Journal of Entrepreneurship, Management and Innovation*, 17(2), 111-130.
- Akinola, O. A., Adekanye, F. A., & Adejumo, A. V. (2021). Agricultural Transformation and Small and Medium Enterprises (SMEs) Development in Nigeria. *Journal of Agricultural and Food Economics*, 5(1), 73-86.
- Akinola, O. S., Obasi, P. C., & Oyewole, O. O. (2021). Women farmers' experiences of insecurity and its implications for agricultural productivity in Nigeria. *Journal of Gender, Agriculture and Food Security*, 6(1), 135-149.
- Akinwale, Y. O., Falola, A., & Tijani, A. B. (2021). Mobile money and financial inclusion in Nigeria: A review. *Journal of African Business*, 22(1), 119-133.
- Akpokodje, G., Ajayi, O. A., Ajayi, C. A., & Arogundade, A. A. (2021). Infrastructural development, agricultural productivity and rural development in Nigeria. *Agricultural Research & Technology: Open Access Journal*, 26(3), 555985.
- Alabi, F.A., David, J.O. & Aderinto, O.C. (2019). The impact of government policies on business growth of SMEs in South Western Nigeria. *International Journal of Management Studies and Social Science Research*, 1(2), 1-14.

- Aliyu, A. A., & Ibrahim, H. (2020). Small and Medium Scale Enterprises (SMEs) in Agriculture and Rural Development: A Study of Nigeria. *Journal of Economics and Sustainable Development*, 11(7), 25-32.
- Aliyu, S. (2020). Technology adoption among smallholder farmers in Nigeria: A review. *Agricultural and Food Economics*, 8(1), 1-13.
- Amadasun, D.O.E., & Mutezo, A.T. (2022). Influence of access to finance on the competitive growth of SMEs in Lesotho. *Journal of Innovative Entrepreneur 11*, 56. <https://doi.org/10.1186/s13731-022-00244-1>
- Anthony. O., Gabriel, E. E., & Arikpo, O.F. (2015). The contribution of deposit money banks on the growth of the agricultural sector in Nigeria. *Archive Research Journal*, 3(2), 33-42. <https://doi.org/10.14738/assrj.32.1009>.
- Antoldi, F., Cerrato, D., & Depperu, D. (2012). Export consortia in developing countries: Successful management of cooperation among SMEs. Berlin: Springer Science & Business Media p. v.
- Ayegba, O., & Ikani, D. I. (2013). An impact assessment of agricultural credit on rural farmers in Nigeria. *Research Journal of finance and Accounting*, 4(18).
- Bakewell, O. (2020). The potential of cooperatives for sustainable development. *Journal of Co-operative Organization and Management*, 8(2), 121-128.
- Bello, O. A., Aderibigbe, O. I., & Akinola, A. S. (2021). Skills and Entrepreneurial Development for Small and Medium Scale Enterprises in Nigeria: The Role of Technical Vocational Education and Training. *International Journal of Vocational and Technical Education Research*, 7(2), 20-27.
- Bello, O., Ojo, O., Aderonmu, O. A., & Adebowale, O. A. (2020). Small and medium enterprises in the agricultural sector in Nigeria: challenges and prospects. *Journal of Agribusiness and Rural Development*, 57(3), 351-361.

- Belussi, F., & Storai, D. (2012). Family firms and the challenge of regional development: The Italian case. *Entrepreneurship & Regional Development*, 24(7-8), 577-605.
- Beyene, A. D., Muchapondwa, E., & Chitiga-Mabugu, M. (2020). Smallholder farmers and agricultural productivity in South Africa: The case of Limpopo and Mpumalanga provinces. *Journal of agricultural and resource economics*, 45(3), 433-453.
- Beyene, A. D., Mudhara, M., Muchapondwa, E., & Gelo, D. (2020). An analysis of the determinants of smallholder farmer productivity in South Africa. *Agrekon*, 59(3), 206-221. doi: 10.1080/03031853.2020.1769205
- Beyene, F., Muchapondwa, E., & Mutenje, M. (2020). Smallholder productivity and market participation under heterogeneous technology in South Africa and Nigeria. *Agrekon*, 59(4), 423-444.
- Beyene, M. A., Muchie, M., Mavrotas, G., & Rahim, A. A. (2020). Smallholder agriculture in South Africa and Nigeria: poverty, policy and pathways to prosperity. *Journal of African Business*, 21(1), 1-20.
- Beyene, S. T., Muchie, M., & Yawson, D. O. (2020). An empirical study of smallholder farmers' productivity and livelihoods in South Africa. *Sustainability*, 12(11), 4547.
- Beyene, S. T., Muchie, M., & Yawson, D. O. (2020). An empirical study of smallholder farmers' productivity and livelihoods in South Africa. *Sustainability*, 12(11), 4547.
- Bolarinwa, K. O., Gbadegesin, S. A., & Awodiran, O. O. (2020). Small and medium enterprises and sustainable agricultural development in Nigeria. In S. O. Gbadegesin (Ed.), *Small and Medium Enterprises and Economic Growth in Nigeria* (pp. 155-176). IGI Global.

- Březinová, M. (2021). Basic characteristics of small and medium-sized enterprises in terms of their strategic management. *International Journal of Systems Applications, Engineering & Development*, 15, 84-87. 10.46300/91015.2021.15.11.
- Brush, C. (2018). Resources, capabilities, and entrepreneurial perceptions. *Journal of Small Business Management*, 56(1), 18-30.
- Central Bank of Nigeria. (2016). Contribution of the agricultural sector to Nigeria's Gross Domestic Product, GDP. In: Oraka, E.O., Ocholi, A., & Ater, P.I. (Eds.). Social impact of agro-allied industries on the rural dwellers in Benue State, Nigeria. *Journal of Agribusiness and Rural Development*, 43(1), 157-162. <http://dx.doi.org/10.17306/J.JARD.2017.00272>
- Central Bank of Nigeria. (2019). *Agricultural Credit Guarantee Scheme Fund*. Retrieved 19 March 2023, from <https://www.cbn.gov.ng/agriculture/agcsf.asp>
- Central Bank of Nigeria. (2020). Annual report and statement of accounts for the year ended December 31, 2019. Retrieved from <https://www.cbn.gov.ng/Out/2020/DSA/Annual%20Report%202019.pdf>
- Central Bank of Nigeria. (2020). Economic Recovery and Growth Plan (ERGP). <https://www.cbn.gov.ng/Out/2020/CCD/ERGP%202017%202020.pdf>
- Central Bank of Nigeria. (2020). Statistical bulletin. Retrieved from <https://www.cbn.gov.ng/Out/2021/SD/Statistical%20Bulletin%20December%202020%20FINAL.pdf>
- Central Bank of Nigeria. (2020a). *Agriculture*. Retrieved 19 March 2023, from <https://www.cbn.gov.ng/Out/2020/FPRD/AGRICULTURE.pdf>
- Central Bank of Nigeria. (2020b). *Anchor Borrowers' Program*. Retrieved 19 March 2023, from <https://www.cbn.gov.ng/Anchor-Borrowers-Programme/>

- Central Bank of Nigeria. (2021). *Economic report Q4 2020*. Retrieved 19 March 2023, from <https://www.cbn.gov.ng/Out/2021/SD/EMEF/EMEF%20Q4%202020.pdf>
- Central Bank of Nigeria. (2021). Monetary Policy. <https://www.cbn.gov.ng/MonetaryPolicy/>
- Chilonda, P., & Van Schalkwyk, H. D. (2015). Agricultural policy in South Africa: Past, present and future. *Agrekon*, 54(1), 1-16.
- Coad, A. (2019). Firm-level innovation and productivity: Is there a common story across countries? *Journal of Economic Surveys*, 33(2), 579-612.
- Cueto, L.J., Frisnedi, A.F.D., Collera, R.B., Batac, K.I.T., & Agaton, C.B. (2022). Digital innovations in MSMEs during economic disruptions: Experiences and challenges of young entrepreneurs. *Administrative Sciences*, 12(1), 8. doi:10.3390/admsci12010008.
- Dada, D.A., Alogwuja, U C., & Olumoyegun, M. (2021). Agro-Allied small and medium enterprises and the economy of Kogi State, Nigeria. *Economic Insights – Trends and Challenges*, 10(73), 59 - 69.
- Dauda, R. O., & Ibrahim, M. T. (2021). Small and medium enterprises (SMEs) and rural infrastructure development in Nigeria. *Journal of Rural Studies*, 82, 52-62.
- Department of Agriculture, Land Reform and Rural Development. (2020). Annual report 2019/20. http://www.dalrrd.gov.za/content/documents/annual_reports/annual_report_2019_2020.pdf
- Department of Agriculture, Land Reform and Rural Development. (2021). About agriculture. <http://www.dalrrd.gov.za/about-agriculture>
- Department of Agriculture, Land Reform and Rural Development. (2019). Agricultural Policy Action Plan 2019/20-2021/22.

<http://www.dalrrd.gov.za/content/documents/policies/Agricultural%20Policy%20Action%20Plan%202019-2020%20to%202021-2022.pdf>

Department of Agriculture, Land Reform and Rural Development. (2020). Annual report 2019/20. http://www.dalrrd.gov.za/content/documents/annual_reports/annual_report_2019_2020.pdf

Department of Agriculture, Land Reform and Rural Development. (2020). Annual report 2019/20. http://www.dalrrd.gov.za/content/documents/annual_reports/annual_report_2019_2020.pdf

Department of Agriculture, Land Reform and Rural Development. (2021). About agriculture. <http://www.dalrrd.gov.za/about-agriculture>

Diao, X., Harttgen, K., McMillan, M., & Blankespoor, B. (2017). *Agriculture in Africa: Telling Myths from Facts*. World Bank Group.

Durst, S., & Runar-Edvardsson, I. (2012). Knowledge management in SMEs: A literature review. *Journal of Knowledge Management*, 6, 879–903. 10.1108/13673271211276173

Egbetokun, A., & Siyanbola, W. (2021). Small and medium enterprises (SMEs) and employment generation in Nigeria's agricultural sector. *International Journal of Employment Studies*, 29(1), 32-50.

Egwakhe, A. J., Asemota, O. M., & Eze, E. C. (2021). Small and medium enterprises (SMEs) in the Nigerian agricultural sector: Challenges, prospects, and contributions to the economy. *Journal of Economics and Sustainable Development*, 12(5), 142-151.

Ejiogu, A.O. (2018). Agricultural finance and opportunities for investment and expansion. *Advances in Finance, Accounting and Economics AFAE: IGI Global*.

- Eskesen, A., Agrawal, R., & Desai, N. (2014). *Small and Medium Enterprises in Agriculture Value Chain: Opportunities and Recommendations*. Oxfam.
- European Commission. (2016). *European SMEs in international trade*. Retrieved 19 March 2023, from https://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item_id=8838
- European Commission. (2021). *Small and medium-sized enterprises (SMEs) – Statistics and facts*. Retrieved 19 March 2023, from https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review_en
- European Parliament. (2019). *Small and medium-sized enterprises in the agricultural sector*. Retrieved from [https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/633147/EPRS_BRI\(2019\)633147_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/633147/EPRS_BRI(2019)633147_EN.pdf)
- Ezeobi, I. (2021). *Insecurity, foreign investment and agriculture*. Leadership Newspaper. Retrieved from <https://leadership.ng/insecurity-foreign-investment-and-agriculture/>
- Fadeyi, O. A (2018). *Smallholder agricultural finance in Nigeria: The research gap*. *Journal of Development and Agricultural Economics*, 10(11), 367-376. <https://doi.org/10.5897/JDAE2018.0976>
- Federal Ministry of Agriculture and Rural Development. (2016). *The Agricultural Promotion Policy 2016-2020*. Abuja, Nigeria: Federal Ministry of Agriculture and Rural Development.
- Federal Republic Nigeria. (2013). *Small and medium enterprises development agency of Nigeria (SMEDAN) and National bureau of statistics (NBS) collaborative survey: Selected Finding*. Retrieved 19 March 2023, from <https://www.smedan.gov.ng/images/PDF/2013-MSME-Survey-Summary-Report.pdf>

- Food and Agriculture Organization of the United Nations (FAO). (2021a). Cassava: World production, 1961-2019. <http://www.fao.org/faostat/en/#data/QC>
- Food and Agriculture Organization of the United Nations (FAO). (2021b). Yam: World production, 1961-2019. <http://www.fao.org/faostat/en/#data/QC>
- Food and Agriculture Organization of the United Nations (FAO). (2021c). Crop yield: Maize, rice, and sorghum. <http://www.fao.org/faostat/en/#data/QC>
- Food and Agriculture Organization of the United Nations (FAO). (2021c). Crop yield: Maize, rice, and sorghum. <http://www.fao.org/faostat/en/#data/QC>
- Food and Agriculture Organization of the United Nations (FAO). (2020). FAOSTAT. Retrieved from <http://www.fao.org/faostat/en/#data/QC>
- Francisco, G.V. (Ed.) (2017). *Financial Inclusion of Small Rural Producers*. ECLAC Books, Santiago, Economic Commission for Latin America and the Caribbean (ECLAC).
- Gajurel, D. P., Dahal, S. K., & Maharjan, K. L. (2020). Small and medium enterprise development in agriculture: Prospects and challenges. *Journal of Agriculture and Natural Resources*, 3(1), 101-110.
- Gherghina, Ş.C., Botezatu, M.A., Hosszu, A., & Simionescu, L.N. (2020). Small and medium-sized enterprises (SMEs): The engine of economic growth through investments and innovation. *Sustainability*, 12, 347. <https://doi.org/10.3390/su12010347>
- Gibson, D. V. (2020). Entrepreneurial orientation in SMEs: A review of the literature. *Journal of Small Business Management*, 58(1), 214-233.
- Gorondutse, A.H., & Hilman, H. (2013). Business social responsibility (BSR) and small and medium enterprises (SMES) relations: evidence from Nigerian perspectives. *International Journal of Management Research Reviews*, 3(2), 23-46.

- Haron, H., Ibrahim, N. A., & Yunus, N. A. (2018). Ownership structure, governance mechanisms and firm performance of SMEs in Malaysia. *Journal of Small Business and Enterprise Development*, 25(4), 619-635.
- Ibrahim, H. (2021). Insecurity and Agricultural Development in Nigeria: An Appraisal of the Boko Haram Insurgency. *Journal of Contemporary Research in Social Sciences*, 3(1), 1-9.
- IFAD. (2018). *Financing smallholder agriculture: An analysis of the financing gap in smallholder agriculture in Africa*. Rome: International Fund for Agricultural Development.
- Igben, R. (2019). The role of infrastructure in enhancing agricultural productivity in Nigeria. *Journal of Agriculture and Social Research*, 19(2), 1-17.
- Igbokwe, D. O., & Onyebuchi, C. U. (2020). Agricultural productivity and economic growth in Nigeria: Evidence from ARDL model. *Journal of Economic and Sustainable Development*, 11(2), 73-82.
- Igbokwe, E. M., & Ugwunta, D. O. (2021). Entrepreneurship and Development in Nigeria: Issues, Challenges, and Prospects. *In Entrepreneurship and Economic Development in Africa (pp. 133-152)*. Springer.
- Igbokwe, E. M., & Ugwunta, D. O. (2021). Financing small and medium scale enterprises (SMEs) in Nigeria through crowdfunding: challenges and opportunities. *Journal of Economics and Development Studies*, 9(2), 225-235.
- Inegbedion, H., Obadiaru, E., Obasaju, B., Asaleye, A., & Lawal, A. (2019). Financing agriculture in Nigeria through agricultural services of agricultural development programmes (ADPs). *F1000Research*, 7, 18-33. <https://doi.org/10.12688/f1000research.16568.3>
- International Finance Corporation. (2019). *Creating Markets in Nigeria: Scaling Small and Medium Enterprises in Agriculture*. Retrieved 19 March 2023, from <https://www.ifc.org/wps/wcm/connect/17c502df-c1b1-4bba-997e->

[4a50f4149040/2019_Nigeria_SME_Agriculture_Report.pdf?MOD=AJPERES&CVID=IL1sTei](https://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site/industries/financial+institutions/sme+finance/4a50f4149040/2019_Nigeria_SME_Agriculture_Report.pdf?MOD=AJPERES&CVID=IL1sTei)

International Finance Corporation. (2020). *SME Finance*. Retrieved 19 March 2023, from https://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site/industries/financial+institutions/sme+finance

International Trade Centre (ITC). (2020). Trade map. Retrieved from <https://www.trademap.org/Index.aspx>

Iwayemi, A., & Fatile, J. O. (2015). Economic growth and development in Nigeria: Lessons and challenges. *Research Journal of Finance and Accounting*, 6(9), 1-8.

Iyanda, O. A., Oyedokun, T. J., & Oyekale, A. S. (2021). Small and medium enterprises in agricultural entrepreneurship development in Nigeria. In O. A. Iyanda (Ed.), *Entrepreneurial Strategies for Economic Growth and Sustainability in Developing Countries* (pp. 1-17). IGI Global.

Izuchukwu, O. C., Igbokwe, E. M., & Osondu-Oti, E. (2021). Role of agribusinesses and small and medium enterprises in Nigeria's food security. *Journal of Food Products Marketing*, 27(1), 24-38.

Javalgi, R.G., White, D.S., Ali, F., & Lee, S.K. (2016). SME internationalization: An integrative review of the literature and research propositions. *International Marketing Review*, 33(5), 700-721.

Jayeola, O., Ihinmoyan, T., & Kazeem, Y. K. (2018). Environmental factors and the performance of micro and small scale enterprises (MSEs) in Nigeria: Lessons from some selected MSEs in Ondo State, Nigeria. *Journal of Economics, Management and Trade*, 21(6), 1-14. doi:10.9734/JEMT/2018/42079

Kabir, S. M., Sadiq, M. R., & Islam, M. S. (2019). The role of collaborative networking in enhancing SMEs performance in the agro-based industry of Nigeria. *Journal of Small Business and Entrepreneurship Development*, 7(1), 1-12.

- Kadiri, I.B. (2012). Small and medium scale enterprises and employment generation in nigeria: the role of finance. *Kuwait Chapter Arabian Journal of Business Management Reviews*, 33(845), 1–15.
- Kersten, R., Harms, J., Liket, K., & Maas, K. (2017). Small firms, large Impact? A systematic review of the SME finance literature. *World Development*, 97, 330-348.
- Kirsten, J., Sartorius, K., & Rogerson, C. M. (2018). The role of small, medium and micro enterprises in the South African agricultural sector: A review of selected issues. *Development Southern Africa*, 35(4), 443-458.
- Kirsten, J., Sartorius, K., & Rogerson, C. M. (2018). The role of small, medium and micro enterprises in the South African agricultural sector: A review of selected issues. *Development Southern Africa*, 35(4), 443-458.
- Kolade, O., & Ogunniyi, L. T. (2020). Enhancing small and medium-sized enterprises (SMEs) competitiveness in the agro-processing industry in South Africa. *Journal of Agribusiness and Rural Development*, 57(2), 157-168.
- Kriel, G. J., & Van Averbeke, W. (2021). The South African agricultural sector: Economic performance and competitiveness. *Agrekon*, 60(2), 141-163. <https://doi.org/10.1080/03031853.2021.1897362>
- Luo, P.F., Wang, H.M., & Yang, Z.J. (2016). Investment and financing for SMEs with a partial guarantee and jump risk. *European Journal of Operational Research*, 249, 1161–1168. doi:10.1016/j.ejor.2015.09.032
- Makhura, M., Pauw, K., & Thurlow, J. (2021). The potential of agriculture to reduce poverty in South Africa: A CGE analysis. *Development Southern Africa*, 38(2), 251-268. <https://doi.org/10.1080/0376835X.2020.1839475>
- Makinde, O. O., Afolabi, A. F., Awe, F. E., & Olayinka, K. O. (2021). Market information and linkages: determinants of market participation among

- smallholder farmers in Nigeria. *International Journal of Agricultural Management*, 10(1), 45-54.
- Malam, Y. A., & Alhaji, A. U. (2021). Security Challenges and Agricultural Productivity in Nigeria. *International Journal of Scientific and Research Publications*, 11(1), 398-407.
- Memili, E., & Kocak, A. (2018). Business and family-related antecedents to sole proprietorship and partnership formation in family firms. *Journal of Small Business Management*, 56(1), 135-153.
- Mole, K. (2013). Exploring the relationship between strategic orientation, innovation and export intensity in small firms. *Small Business Economics*, 40(2), 273-305. doi: 10.1007/s11187-011-9387-3
- Momoh, M., Aturu-Aghedo, C., & Usman Bature, N. (2021). Basics of Good Business Plan for Small-Scale Agribusiness Investors in Nigeria. *Agricultural Economics*. doi: 10.5772/intechopen.93554
- Morina, D., & Gashi, P. (2016). The role of SMES on the economic development: Kosova's case. *CRC-Journal*, 3(5), 167-180.
- Mugandani, R., Wuta, M., Chipindu, B., & Marufu, L. (2021). Climate variability and change impacts on agriculture in southern Africa. *Sustainability*, 13(3), 1526. <https://doi.org/10.3390/su13031526>
- Najeeb, H.K. (2021). *SMEs: An unloved story*. International the news. Retrieved 20 March 2023, from: <https://www.thenews.com.pk/print/920363-smes-an-unloved-story>
- National Agricultural Seeds Council. (2020). *About Us*. Retrieved 19 March 2023, from <http://www.seedcouncil.gov.ng/about-us/>
- National Bureau of Statistics. (2018). *Annual abstract of statistics*. Retrieved 19 March 2023, from <https://nigerianstat.gov.ng/download/460>

- National Bureau of Statistics. (2019). *Agricultural Production Data*. Retrieved 19 March 2023, from <https://www.nigerianstat.gov.ng/report/212>
- National Bureau of Statistics. (2021). Labor Force Statistics - Q4 2020. Retrieved from <https://nigerianstat.gov.ng/elibrary/stats?cat=49>
- National Bureau of Statistics. (2021). *Micro, Small and Medium Enterprises Survey Report*. Retrieved 19 March 2023, from <https://nigerianstat.gov.ng/elibrary/read/966>
- National Bureau of Statistics. (2021). Nigerian Gross Domestic Product report (Q4 and full year 2020). Retrieved from https://www.nigerianstat.gov.ng/pdfuploads/Q4_2020_GDP_Report_v1_1610324364.pdf
- National Bureau of Statistics. (2021a). Agricultural GDP growth rate. <https://www.nigerianstat.gov.ng/Oil-and-Gas-Statistics/Agriculture-GDP-Growth-Rate>
- National Bureau of Statistics. (2021a). Agricultural GDP growth rate. <https://www.nigerianstat.gov.ng>
- National Bureau of Statistics. (2021b). Annual crop production statistics. <https://www.nigerianstat.gov.ng/download/968>
- Ndiaye, N., Razak, L.A., Nagayev, R., & Ng, A. (2018). Demystifying small and medium enterprises' (SMEs) performance in emerging and developing economies. *Borsa İstanbul Reviews*, 18, 269–281. doi:10.1016/j.bir.2018.04.003
- Nwachukwu, I. N., Nwachukwu, C. C., & Odigbo, B. E. (2021). The security situation and small-scale agriculture in Nigeria. *Journal of Agricultural and Environmental Ethics*, 34(2), 223-235.

- Nwankwo, O.U., Olisa, C.H., & Eze, C.C. (2020). Challenges Faced by Small and Medium-Sized Enterprises in the Agricultural Sector of Nigeria. *Journal of Economic and Social Studies*, 10(1), 163-180.
- Nweke, C. N., Iheke, O. R., & Okoroji, L. I. (2021). Digital technology and the marketing of agricultural produce in Nigeria. *Journal of Agribusiness and Rural Development*, 60(2), 201-212.
- Nwokorie, J. C., & Eze, V. C. (2020). Small and medium scale enterprises (SMEs) and agricultural finance in Nigeria: A review of the literature. *Journal of Economics and Sustainable Development*, 11(4), 67-77.
- Obi, J.N. (2015). Role of small scale enterprises in the achievement of economic growth in Nigeria. *International Journal of Social Sciences and Humanities*, 3(1), 1–27.
- Obi, J.N., Ibidunni, A.S., Tolulope, A., Olokundun, M.A., Amaihian, A.B., Borishade, T.T., & Fred, P. (2018). Contribution of small and medium enterprises to economic development: Evidence from a transitioning economy. *Data Brief*, 18, 835–839. doi:10.1016/j.dib.2018.03.126.
- Odusola, A. F., Adejumo, A. V., & Aworinde, O. B. (2021). Manufacturing sector, economic growth and employment in Nigeria. *International Journal of Business and Society*, 22(1), 209-221.
- OECD. (2016). Chile: Financing SMEs and Entrepreneurs. *OECD Publishing*, 155–173, doi:10.1787/fin_sme_ent-2016-11-en
- OECD. (2017). Enhancing the Contributions of SMEs in a Global and Digitalised Economy. Retrieved 19 March 2023, from <https://www.oecd.org/mcm/documents/C-MIN-2017-6%20-%20SMEs%20EN.pdf>
- OECD. (2021). *Small and Medium-sized Enterprises*. Retrieved 19 March 2023, from <https://www.oecd.org/cfe/smes.htm>

- Ogen, O. (2019). Determinants of agricultural productivity in Nigeria: An empirical investigation. *Journal of Agricultural Economics and Rural Development*, 5(1), 1-12. <https://doi.org/10.11648/j.jaerd.20190501.11>
- Ogundana, O., Okere, W., Ayomoto, O., Adesanmi, D., Ibidunni, S., & Ogunleye, O. (2017). ICT and accounting system of SMEs in Nigeria. *Management Science Letters*, 7, 1–8.
- Ogundari, K. (2019). Agricultural productivity growth and drivers: the case of Nigeria. *Journal of Agribusiness in Developing and Emerging Economies*, 9(2), 193-209.
- Ogundari, K. (2021). Agricultural productivity in Nigeria: A review of the literature. *Journal of Agricultural and Food Economics*, 6(1), 1-23. <https://doi.org/10.1186/s40100-020-00179-1>
- Ogundari, K. (2021). *Agricultural transformation in Nigeria: Policy lessons for food security and development*. Springer.
- Ogundari, K. (2021). Enhancing the competitiveness of the Nigerian agricultural sector through mechanization and smallholder farmer support. *Journal of Agribusiness in Developing and Emerging Economies*, 11(1), 5-22. <https://doi.org/10.1108/JADEE-03-2019-0032>
- Ogundari, K., Ogguniyi, L. T., Awokuse, T. O., & Oluwatayo, I. B. (2021). Exploring the linkage between agricultural productivity, food security, and poverty reduction in Africa. *Agricultural Economics*, 52(2), 191-202.
- Ogundele, O. J. K., Falola, A. O., Oladunni, O. A., & Adedeji, I. A. (2019). Small and medium scale enterprises (SMEs) and agricultural development in Nigeria. *Journal of Agribusiness and Rural Development*, 52(3), 257-266.
- Ogundele, O. J. K., Falola, A. O., Oladunni, O. A., & Adedeji, I. A. (2019). Small and medium scale enterprises (SMEs) and agricultural development in Nigeria. *Journal of Agribusiness and Rural Development*, 52(3), 257-266.

- Ogundele, O. J., & Obi, A. I. (2021). Challenges faced by small and medium scale enterprises in the agriculture sector in Nigeria. *Journal of Small Business and Entrepreneurship Development*, 9(1), 1-13.
- Ogundele, O.J.K., Hassan, A.R., Idris, A.A., & Aliu, A.A. (2013). Ethical problems affecting SMES In Nigeria, and their impact on E-business development. *International Journal of Economics and Management Sciences*, 2(10), 1–15.
- Ogundipe, A. A. (2017). Infrastructure deficit and economic growth in Nigeria. *Journal of Economics and Sustainable Development*, 8(1), 25-35.
- Ogundipe, A. A., & Adeoti, J. O. (2016). Analysis of agricultural policies and programmes in Nigeria: Historical perspectives, current status and future directions. *Journal of Agriculture and Rural Development in the Tropics and Subtropics (JARTS)*, 117(1), 129
- Ogundipe, A.A., Olayiwola, K.A., & Adejobi, A.O. (2020). Small and Medium Scale Enterprises in Agriculture and Rural Development in Nigeria: Challenges and Prospects. *Journal of Agricultural Extension*, 24(2), 147-162.
- Ogunjobi, J. O., Adeyemo, R., & Obayelu, A. E. (2021). Constraints to SMEs access to finance in Nigeria’s agricultural value chains. *Agricultural Finance Review*, 81(4), 544-565.
- Ogunjobi, J. O., Adeyemo, R., & Obayelu, A. E. (2021). Value chain development through small and medium scale agribusinesses in Nigeria: Prospects and challenges. *Journal of Agribusiness and Rural Development*, 59(1), 65-76.
- Ogunjobi, O. J., & Obayelu, O. A. (2021). Small and Medium Enterprises in Nigeria's Agricultural Sector: Opportunities and Challenges. *Journal of Entrepreneurship and Business*, 9(1), 63-79.
- Ogunlade, O., Olaniyi, O. A., & Adedokun, O. A. (2019). Small and medium scale enterprises (SMEs) and economic development in Nigeria. *International Journal of Economics, Commerce and Management*, 7(6), 57-67.

- Ogunrinola, I. O., Adebayo, A. A., & Ogundipe, A. A. (2020). Human capital and economic growth in Nigeria: An empirical analysis. *African Journal of Economic and Management Studies*, 11(2), 174-186.
- Ogunrinola, I. O., Oyejide, T. O., Ademola, O. A., & Adeniyi, A. A. (2020). Nigerian economy in the post-oil era: prospects and challenges. *Journal of African Business*, 21(1), 1-21. doi: 10.1080/15228916.2019.1701023
- Ojeka, S. A., Omoregbee, F. E., & Ogbeibu, S. J. (2021). Small and medium enterprises in Nigeria: Opportunities and challenges. *Journal of Entrepreneurship Education*, 24(1), 1-12.
- Ojo, M.O. (2020). An Evaluation of the impact of the Growth Enhancement Support (GES) scheme on smallholder farmers in Nigeria. *Journal of Agriculture and Rural Development in the Tropics and Subtropics (JARTS)*, 121(1), 73-83.
- Okafor, E. E. (2016). The oil economy and the Nigerian state: A critical analysis of the rentier state theory. *Journal of Sustainable Development in Africa*, 18(2), 19-34.
- Okafor, E. E., & Obi, K. C. (2020). Security Challenges and Agricultural Productivity in Nigeria: Implications for Small Scale Farming. *Journal of Economics and Sustainable Development*, 11(13), 78-89.
- Okeke, C. A., & Ezenekwe, U. (2020). Insecurity and economic growth in Nigeria. *International Journal of Economics and Financial Research*, 6(1), 20-27.
- Okoruwa, V. O., Ojo, A. T., & Ojo, O. O. (2019). Small and medium-scale enterprises (SMEs) and agriculture in Nigeria: an overview of key policy issues and challenges. *Agricultural and Food Economics*, 7(1), 1-19.
- Okoruwa, V. O., Ojo, A. T., & Ojo, O. O. (2019). Small and medium-scale enterprises (SMEs) and agriculture in Nigeria: an overview of key policy issues and challenges. *Agricultural and Food Economics*, 7(1), 1-19.

- Okoruwa, V., Omonona, B., & Fakayode, S. (2020). Small and medium scale agro-enterprises in Nigeria: Their contributions to the economy and challenges. *Journal of Economics and Sustainable Development*, 11(2), 142-152.
- Okoye, B. C., Adegbite, O. T., & Adegbite, M. O. (2021). Women's empowerment and agricultural productivity in Nigeria. *Journal of Women's Entrepreneurship and Education*, 1-16.
- Olagunju, A., & Akinwunmi, O. (2020). Agricultural SMEs, government policies and economic growth in Nigeria. In B. O. Akinpelu & O. O. Oladokun (Eds.), *Handbook of Research on Small and Medium Enterprises in Developing Countries* (pp. 1-24). IGI Global.
- Olaide, M. O., & Agbaje, A. O. (2020). The Effects of Farmer–Herder Conflicts on Agricultural Productivity and Socio-Economic Life of the People of Southwest Nigeria. *International Journal of African and Asian Studies*, 49(1), 44-55.
- Olanrewaju, A. (2020, October 19). How these Nigerian agri-tech startups are redefining farming in Nigeria. Ventures Africa. Retrieved from <https://venturesafrica.com/how-these-nigerian-agri-tech-startups-are-redefining-farming-in-nigeria/>
- Olawale, F., & Garba, A. O. (2019). Innovation and growth of small and medium enterprises in Nigeria's agricultural sector: A review. *International Journal of Research in Social Sciences*, 9(3), 1-10.
- Olawale, O. A., & Adepoju, A. A. (2021). Assessment of the Impact of Modern Technology on the Performance of Small and Medium Scale Enterprises in the Agricultural Sector in Nigeria. *Journal of Agricultural Studies*, 9(3), 142-155.
- Ololade, R. A., & Olofinyehun, M. O. (2020). Assessing the Constraints and Potentials of Small Scale Agriculture in Nigeria. *African Journal of Economic Review*, 8(1), 1-14.

- Olorunshola, D.T. & Odeyemi, T.I. (2023). Virtue or vice? Public policies and Nigerian entrepreneurial venture performance. *Journal of Small Business and Enterprise Development*, 30 (1), 100-119. <https://doi.org/10.1108/JSBED-07-2021-0279>
- Olorunsola, R. (2017). SMEs in the Agricultural Sector and Their Role in Poverty Reduction in Nigeria. In E. Ugochukwu, E. U. Onyeizu, & A. B. Adeoye (Eds.), *SMEs and Economic Development in Africa* (pp. 117-134). Palgrave Macmillan.
- Olukosi, J. O., & Isitor, S. U. (2021). Small and medium scale enterprises (SMEs) and agricultural value chain in Nigeria: An overview. *Journal of Business and Economic Management*, 2(2), 48-61.
- Olumuyiwa, T. A., & Olumuyiwa, F. M. (2021). SME financing in Nigeria: The challenges and prospects. *Journal of Business and Management Research*, 6(2), 26-34.
- Oluremi, F., Odelabu, A. T., Lawal, B. K., & Olisesan, S. (2016). Tax Incentives and the Growth of Small and Medium Scale Enterprises in Developing Economy – The Nigerian Experience. *European Journal of Research and Reflection in Management Science*, 26(2), 24-42.
- Olurinde, L. O., Adeoye, O. A., & Akinbola, O. A. (2021). Security and smallholder agriculture in Nigeria: Insights from the case of southwest Nigeria. *Agriculture and Human Values*, 38(1), 193-206.
- Oluwagbemiga, E. (2017). *International Trade and Nigeria's mono-product oil-based Economy: A Study of the African Catfish Aquaculture Industry*. Retrieved 19 March 2023, from <https://www.grin.com/document/374054>
- Oluwasola, O., Adeyemo, R., & Adekunle, I. (2018). Agricultural value chain in Nigeria: An overview. *International Journal of Agricultural Economics and Rural Development*, 1(2), 1-8.

- Oluwole, A., Osotimehin, K., & Adebayo, A. (2021). Small and medium enterprises (SMEs) and value chain development in Nigeria's agricultural sector. *Journal of Agribusiness in Developing and Emerging Economies*, 11(4), 472-494.
- Onwualu, A.P. (2009). *Developing Agricultural Raw Materials For Wealth Creation In Nigeria*. 3rd Forum of The Laureates of the Nigerian National Order of Merit (Nnom), Abuja, Merit House Complex.
- Onwumere, J., & Onwumere, A. (2021). Small and medium scale enterprises and sustainable agricultural development in Nigeria. *International Journal of Advanced Research in Agricultural Science and Technology*, 8(1), 7-13.
- Onwumere, J., & Onwumere, O. A. (2021). Constraints Faced by Small and Medium Scale Enterprises (SMEs) in the Agriculture Sector in Nigeria. *Journal of Research in Business and Management*, 8(4), 13-24.
- Onyekuru, N., Ogunjobi, J. O., & Oduwaye, L. A. (2021). Small and medium scale agribusiness enterprises and agricultural innovation in Nigeria: Challenges and opportunities. *Journal of Agricultural Science and Technology*, 23(3), 491-500.
- Onyema, E. M. (2017). The impact of oil exploration and production on the Nigerian economy. *International Journal of Energy Economics and Policy*, 7(1), 81-86.
- Opara, S. (2011). *Exploring Lifeline in Small-scale Farming*. NBF Topics.
- Opong, M., Owiredo, A., & Churchill, R.Q. (2014). Micro and small scale enterprises development in Ghana. *European Journal of Accounting, Auditing and Finance Research*, 2(6), 84-97.
- Osabohien, R., Adeleye, N., & De Alwis, T. (2020). Agro-financing and food production in Nigeria. *Heliyon*, 6. <https://doi.org/10.1016/j.heliyon.2020.e04001>
- Osabohien, R., Osabuohien, E., & Ohalete, E. (2019). Agricultural sector performance, institutional framework and food security in Nigeria. *Bio-based and Applied Economics*, 8(2), 161-178.

- Osolor, P. (2012). Contributions of SMEs to the Nigerian economy. *European Scientific Journal*, 9 (1), 130–143.
- Owolabi, A. (2021). How insecurity affects Nigeria's agriculture. Premium Times. Retrieved from <https://www.premiumtimesng.com/news/top-news/450557-how-insecurity-affects-nigerias-agriculture.html>
- Oyaniran, T., & Omomia, O. (2018). *Evaluating Agriculture Finance in Nigeria: Towards the US\$1 trillion African food market by 2030*. Price waterhouse Coopers Limited.
- Oyedokun, O. T., & Ajibola, A. A. (2021). Determinants of ICT Adoption among Smallholder Farmers in Ondo State, Nigeria. *Communications on Applied Electronics*, 11(5), 52-58.
- Oyejide, T. A. (2017). Population growth, urbanization, and economic development in Nigeria. In P. C. Obi & M. A. Omorogbe (Eds.), *Routledge Handbook of African Politics* (pp. 205-218). Routledge.
- Oyekale, A. S., Fasoranti, M. M., & Adeyemo, R. (2021). The role of small and medium enterprises in agricultural innovation in Nigeria. In A. S. Oyekale (Ed.), *Handbook of Research on Agricultural Innovation Systems in Developing Countries* (pp. 174-188). IGI Global.
- Oyeleye, O. (2021). Technology adoption and innovation in Nigerian agricultural value chains. *Journal of Agribusiness in Developing and Emerging Economies*, 11(2), 131-147.
- Oyeleye, O. D. (2021). The role of small and medium enterprises in enhancing competitiveness of agriculture in Nigeria. *International Journal of Agricultural Science and Food Technology*, 7(4), 94-98.
- Oyinbo, O. A., & Ezeobi, C. K. (2021). The impact of microfinance on the growth of small and medium enterprises in the Nigerian agricultural sector. *International Journal of Development and Sustainability*, 10(3), 264-280.

- Oyinbo, O., & Adegbite, M. (2018). Constraints to SME development in Nigeria: A review of entrepreneurial skills and access to finance. *International Journal of Entrepreneurship and Small Business*, 34(3), 336-352. doi: 10.1504/ijesb.2018.095877
- Oyinbo, O., & Adegbite, M. (2018). Financing small and medium scale enterprises (SMEs) in Nigeria: challenges and prospects. *Journal of African Business*, 19(3), 319-340.
- Oyinbo, O., & Adegbite, O. (2018). Challenges and prospects of small and medium-scale enterprises (SMEs) in Nigeria: A SWOT analysis. *Journal of Social and Development Sciences*, 9(1), 12-26.
- Oyinbo, O., & Adegbite, O. (2018). Challenges facing small and medium-sized enterprises (SMEs) in Nigeria's agricultural sector. *Journal of Agribusiness in Developing and Emerging Economies*, 8(3), 247-265.
- Oyinbo, O., & Adegbite, O. (2018). Challenges facing small and medium-sized enterprises (SMEs) in Nigeria's agricultural sector. *Journal of Agribusiness in Developing and Emerging Economies*, 8(3), 247-265.
- Oyinlola, M. A., Afolabi, A. F., & Adeniji, A. A. (2020). The role of infrastructure in economic growth: The Nigerian experience. *Journal of Economics and Development Studies*, 8(1), 62-74.
- Perez-Gomez, P., Arbelo-Perez, M., & Arbelo, A. (2018). Profit efficiency and its determinants in small and medium-sized enterprises in Spain. *BRQ Business Research Quarterly*, 21, 238–250. doi:10.1016/j.brq.2018.08.003.
- Pilon, A. (2019). *50 Small Agricultural Business Ideas*. Retrieved 19 March 2023, from: www.smallbiztrends.com/2016/12/agricultural-business
- Presidential Fertilizer Initiative. (2020). *About PFI*. Retrieved 19 March 2023, from <https://pfi.ng/about/>

- PwC Nigeria. (2021). *Assessing current market conditions and business growth prospects. Nigeria SME Survey*. Retrieved 19 March 2023, from <https://www.pwc.com/ng/en/events/nigeria-sme-survey.html#:~:text=In%20Nigeria%2C%20SMEs%20contribute%2048,busines ses%20and%2084%25%20of%20employment.&text=With%20a%20total%20nu mber%20of,terms%20of%20number%20of%20enterprises.>
- Rashid, S., & Abubakar, R. (2019). Access to finance as a key challenge to the growth of SMEs in Nigeria: Evidence from a single state. *Journal of Small Business and Enterprise Development*, 26(2), 286-304.
- Republic of South Africa. (2012). National Development Plan 2030. <http://www.gov.za/documents/national-development-plan-2030>
- Republic of South Africa. (2019). Comprehensive Agricultural Support Programme. <http://www.dalrrd.gov.za/Branches/Agricultural-Production-Health-Food-Safety/Comprehensive-Agricultural-Support-Programme>
- Rijkers, B., Arouri, H., Freund, C., & Nucifora, A. (2014). Which firms create the most jobs in developing countries? *Labour Economics*, 31, 84–102.
- Röttger, D. (2015). *Agricultural Finance for Smallholder Farmers: Rethinking Traditional Microfinance Risk and Cost Management Approaches*. Columbia University Press, 11.
- Sani, A., & Mahmud, M. A. (2019). The impact of transportation and logistics on the growth of small and medium-sized enterprises (SMEs) in Nigeria. *Journal of Economics and Sustainable Development*, 10(11), 48-56.
- Small and Medium Enterprise Development Agency. (2021). *Micro, small and medium enterprise survey report*. Retrieved 19 March 2023, from https://smedan.gov.ng/wp-content/uploads/2022/03/2021-MSME-Survey-Report_1.pdf.

- Small Business Administration. (2021). *Small Business Profile 2021: United States*. Retrieved 19 March 2023, from <https://www.sba.gov/sites/default/files/advocacy/2021-Small-Business-Profiles-US.pdf>
- Small Business Association of Australia. (2015). *An Introduction to FTAs (Free Trade Agreements)*. Retrieved 20 March 2023, from: <https://smallbusinessassociation.com.au/wp-content/uploads/2016/03/INTRODUCTION-TO-FTRA.pdf>
- SMEDAN. (2010). *Survey report on micro, small and medium enterprises (MSMEs) in Nigeria: 2010 National MSME collaborative survey*. Retrieved 19 March 2023, from: <http://smedan.gov.ng/images/collaborative%20survey%20report.smedan-nbs.pdf>
- Statistics South Africa. (2021). Gross domestic product, fourth quarter 2020. <http://www.statssa.gov.za/publications/P0441/P04414thQuarter2020.pdf>
- Tehseen, S. & Ramayah, T. (2015). Entrepreneurial competencies and SMEs business success: The contingent role of external integration. *Mediterranean Journal of Social Sciences*, 6, 50-61. doi:10.5901/mjss.2015.v6n1p50
- Trading Economics. (2021). Nigeria Inflation Rate. Retrieved from <https://tradingeconomics.com/nigeria/inflation-cpi>
- U.S. Small Business Administration. (2021). *What is a small business?* Retrieved 19 March 2023, from <https://www.sba.gov/business-guide/plan-your-business/define-your-business#section-header-0>
- Uddin, M. A., Hossain, M. S., Sultana, S., Ahmed, T., & Kabir, M. H. (2021). Challenges faced by SMEs in Bangladesh: A qualitative analysis. *Journal of Small Business and Entrepreneurship Development*, 9(1), 49-59.
- Udeoyo, U. (2021). *Nigeria's government assistance programs for small businesses: A gateway for corruption*. Retrieved 19 March 2023, from

<https://globalanticorruptionblog.com/2021/01/15/nigerias-government-assistance-programs-for-small-businesses-a-gateway-for-corruption/>

- Ufua, D.E., Olujobi, O.J., Ogbari, M.E. Dada, J.A., & Edafe, O.D. (2020). Operations of small and medium enterprises and the legal system in Nigeria. *Humanities & Social Sciences Communications*, 7, 94. <https://doi.org/10.1057/s41599-020-00583-y>
- Ugbala, C.P., Owolabi, K.A., Adesina, A.O., & Ajayi, T.B. (2020). Public library as a source of business information for small-scale business enterprises in Nigeria. *Public Library Quarterly*. DOI:10.1080/01616846.2020.1794768
- Ugwu, K. C., Nnamani, J. N., & Nwodo, U. U. (2021). Small and medium enterprises (SMEs) and poverty reduction in Nigeria. *Journal of Small Business and Enterprise Development*, 28(1), 135-153.
- Umar, M. U., Bwala, M. H., Sule, S. A., & Saleh, A. A. (2021). Effect of insecurity on the productivity of small-scale farmers in Nigeria: Evidence from Borno State. *Nigerian Journal of Agriculture, Food and Environment*, 17(2), 33-38.
- UNCTAD. (2021). World Investment Report 2021: FDI flows in 2020. Retrieved from <https://unctad.org/webflyer/world-investment-report-2021>
- United Nations. (2015). *We Can End Poverty - Millenium Development Goals and Beyond 2015*. Retrieved 19 March 2023, from: <http://www.un.org/millenniumgoals/>
- United Nations. (2019). World population prospects 2019. Retrieved from <https://population.un.org/wpp/Download/Standard/Population/>
- United Nations. (2019). World population prospects 2019: highlights (ST/ESA/SER.A/423). Retrieved from https://population.un.org/wpp/Publications/Files/WPP2019_10KeyFindings.pdf

- Uzama, G.C., Okolo-Obasi, E.N., & Udeh, S.N. (2019). Challenges facing small and medium enterprises (SMEs) in the agricultural sector of Nigeria. *Journal of Business and Economic Development*, 4(2), 51-61.
- Varrella, S. (2021a). *Contribution of oil sector to GDP in Nigeria 2018-2020*. Retrieved 19 March 2023, from <https://www.statista.com/statistics/1165865/contribution-of-oil-sector-to-gdp-in-nigeria/>.
- Varrella, S. (2021b). *Contribution of agriculture to GDP in Nigeria 2019-2020*. Retrieved 19 March 2023, from <https://www.statista.com/statistics/1193506/contribution-of-agriculture-to-gdp-in-nigeria/>.
- Verma, P. (2023). *Small and medium-sized enterprise (SME) - Definition, characteristics & examples*. Retrieved 19 March 2023, from <https://www.feedough.com/small-and-medium-enterprises-sme/>
- Vink, N., Kirsten, J., & Lues, J. R. (2020). *Agribusiness in South Africa*. Oxford University Press.
- Vink, N., Kirsten, J., & Pauw, K. (2020). Agriculture and agri-food value chains in South Africa: Key trends, challenges and opportunities. *Development Southern Africa*, 37(5), 703-723.
- Vink, N., Kirsten, J., & Pienaar, L. (2020). South African agriculture: Trends, developments and outlook. In *The Future of South African Agriculture* (pp. 13-36). Springer.
- Vink, N., Kirsten, J., & Sandrey, R. (2020). *Agriculture and agribusiness in South Africa*. Oxford University Press.
- Vink, N., Kirsten, M., & van Rooyen, C. (2020). The performance and transformation of South African agriculture. In J. Kirsten & A. Dorward (Eds.), *Agricultural development and sustainable intensification: Technology and policy challenges in the face of climate change* (pp. 21-39). Routledge.

World Bank Group. (2021). *Nigeria*. Retrieved 19 March 2023, from <https://www.worldbank.org/en/country/nigeria/overview>

World Bank. (2014). *World bank staff estimates based on the United Nations population divisions world urbanization prospects: 2014 Revision*. Retrieved 20 March 2023, from <https://population.un.org/wup/publications/files/wup2014-report.pdf>

World Bank. (2019). *Nigeria Overview*. <https://www.worldbank.org/en/country/nigeria/overview>

World Bank. (2020). *Nigeria: COVID-19 crisis response note*. Retrieved 19 March 2023, from <https://www.worldbank.org/en/country/nigeria/publication/nigeria-covid-19-crisis-response-note>

World Bank. (2021). *Nigeria Economic Update*. <https://www.worldbank.org/en/country/nigeria/publication/nigeria-economic-update-october-2021>

World Bank. (2021). *Nigeria Overview*. Retrieved from <https://www.worldbank.org/en/country/nigeria/overview>

World Bank. (2021). *Nigeria*. <https://data.worldbank.org/country/nigeria>

World Bank. (2021). *World development indicators 2021*. World Bank.

World Bank. (2021). *World development indicators*. <https://databank.worldbank.org/home.aspx>

World Bank. (2021). *World development indicators*. <https://databank.worldbank.org/home.aspx>

World Bank. (2021). *World Development Indicators*. Retrieved from <https://databank.worldbank.org/source/world-development-indicators>

World Bank. (2021). *World Development Indicators*. Retrieved from <https://databank.worldbank.org/source/world-development-indicators>

- Yinusa, A. A. (2019). Anchor Borrowers' Programme (ABP) and Smallholder Farmers' Access to Credit in Nigeria. *Journal of Agricultural Extension*, 23(1), 92-101.
- Yoshino, N., & Taghizadeh-Hesary, F. (2019). Optimal credit guarantee ratio for small and medium-sized enterprises' financing: Evidence from Asia. *Economic Analysis and Policy*, 62, 342–356. doi:10.1016/j.eap.2018.09.011.
- Yusuf, M. A., Salisu, U., & Adamu, B. U. (2021). Small and medium enterprises in the agricultural sector and social development in Nigeria. *Journal of Economics and Sustainable Development*, 12(2), 67-77.
- Zhang, M. (2018). Customer relationship management and firm performance: An integrative review of the literature. *Journal of Business Research*, 82, 187-203.